Lecture
ON
THE PRODUCTION, OUT OF THE BODY, OF PULMONARY SIGNS OBTAINED BY AUSCULTATION AND PERCUSSION.

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GENTLEMEN,—In my lectures on Auscultation and Percussion given during the present session I have introduced illustrations of pulmonary signs produced either in lungs, healthy and diseased, after their removal from the body, or by imitating artificially the physical conditions which the signs represent. I have not heretofore appreciated the interest and value of such illustrations, as, in the first place, affording aid in becoming familiar with the differential characters of different signs; in the second place, corroborating the connexion of cause and effect between the signs and certain physical conditions; and, in the third place, shedding light on the mechanism of the production of the signs. I propose in this lecture to give a *résumé* of the illustrations which my lectures have embraced. I am led to do this in order that you may be incited to repeat them at your leisure, and perhaps add to them others which may be equally or more interesting and instructive. We will consider first the signs obtained by percussion. The signs furnished by auscultation naturally arrange themselves into three groups — namely, respiratory sounds, adventitious sounds or râles, and vocal sounds.

SIGNS OBTAINED BY PERCUSSION.

There are two articles which may serve to illustrate the normal vesicular resonance on percussion artificially—namely, a fine sponge of large size and a loaf of bread. These articles resemble the lungs in containing air within innumerable minute spaces. The distinctive characters of the normal vesicular resonance are due to the presence of air in the air vesicles or pulmonary alveoli. The characters which distinguish the resonance are lowness of pitch and a peculiar quality of sound called the vesicular quality. The resonance is variable as regards intensity, and therefore it derives no distinctive character from that source. Of the two articles named, the bread-loaf is much to be preferred. What is known as the "brick" loaf is best suited for the illustration. Covering the upper crust of the loaf with a napkin, folded once or twice, in order to diminish the noise produced by the contact of the fingers of the percussor, the resonance elicited by percussion has a pretty close resemblance to the resonance on percussing the healthy chest. Like the latter, it is low-pitched, and the quality is *sui generis*.

A bread-loaf may be made to illustrate *flatness, dulness, tympanitic resonance*, and the resonance which I have distinguished as *vesiculo-tympanitic*—the four signs obtained by percussion. Flatness is produced in a portion of the loaf by dipping it in water and allowing it to remain for a few moments. Up to the line on the loaf corresponding to the level of the water there is flatness. Above this line, for a little space, the interstices of the loaf being only filled in part with the water, there is dulness. In vesicular resonance flatness and dulness are thus illustrated in a single loaf. The highest pitch of dulness, as compared with the vesicular resonance, will be found to be invariable. A still better plan is to immerse a part of a loaf in a solution of gelatine and allow it to remain until the gelatine congeals. The loaf then may serve to illustrate the three signs just named for a considerable period. Tympanitic resonance in a bread-loaf is illustrated by removing, in a portion of a loaf, all but the crust. The resonance is tympanitic over that portion, and vesicular over the remainder of the loaf. Vesiculo-tympanitic resonance is illustrated as follows: In a portion of a loaf remove a number of sections by passing through it a hollow cylinder of glass about half an inch in diameter. The distinctive characters of this sign are increased intensity, elevation of pitch, and the quality and combination of the vesicular and the tympanitic. These characters are obtained when several sections are removed in the way just stated, and they are brought into contrast with the imitation of the vesicular resonance by percussing over the portion of the loaf which remains intact.

Tympanitic resonance is illustrated by percussing indiarubber hollow balls and bags differing in size. Other things being equal, the resonance is higher in pitch the smaller the ball. The indiarubber bag enclosed within the leather case in the modern football, probably contains as much air as is generally contained within the chest in cases of pneumo-hydro- or pneumopyo-thorax. The pitch of resonance on percussing such a bag inflated will be found to be higher than that of the resonance of the bread-loaf. This illustrates what I believe to be true—namely, that a purely tympanitic resonance in cases of disease is invariably higher in pitch than the normal resonance in the person examined.

The amphoric and the cracked metal resonance, which may be regarded as varieties of tympanitic resonance, are readily produced, the former by percussing indiarubber bags well inflated, and the latter by percussing hollow balls of small size with free openings. To obtain these varieties of tympanitic resonance, the bag or ball is to be held against the ear when the percussion is made.

RESPIRATORY SIGNS.

I know of no article by which may be illustrated the *normal vesicular murmur of respiration* as the normal vesicular resonance on percussion is illustrated by the loaf of bread. This murmur, however, may be produced outside of the body by using the human lungs, or those of the sheep or calf. Inserting the nozzle of a pair of bellows into the larynx or trachea, and imitating the acts of respiration, the distinctive characters of the normal respiratory murmur may be satisfactorily studied. The ear may be applied immediately to the lungs, covered with a few thicknesses of cloth, artificial respiration being produced by an assistant, or the stethoscope may be used. The binaural stethoscope is to be preferred. In using this instrument, here or on the living subject, care is to be taken that it is properly constructed. Many of these instruments are useless in consequence of defects in their construction. The bulbs at the aural extremities should be of a size admitting their easy introduction into the ear, but not allowing them to enter too far, and the curves at the extremities should bring the openings into the bulbs in the direction of the meatus. That the binaural stethoscope is not universally used is owing, in a great measure, to the want of knowledge or attention on the part of instrument makers as regards essential points in its construction. Lowness of pitch and a quality of sound which, like the vesicular quality in the normal resonance on percussion, is *sui generis*, are illustrated by artificial respiration in lungs removed from the body. These are the distinctive characters of the normal vesicular murmur of respiration; and that they are produced by the movement of air in the air vesicles or alveoli, and not glottic sounds, as contended by Eichhorst and others, is proved by the fact that they are as fully reproduced by inserting the nozzle of the bellows into the trachea or a primary bronchus as into the larynx. My own theory respecting the mode of production of this peculiar quality is, that it is caused by the separation of the bronchioles, the walls of which are in contact and slightly adherent at the end of the expiratory act.

Bronchial respiration is illustrated by simply blowing into tubes of different sizes. Indiarubber tubes are to be used of sufficient length to reach from the mouth to the ear; in the latter situation being covered by the palm of the hand, in order to shut out extraneous noises. With an equal force of the current of air, the field of the sound is high in proportion as the tube is small. This sign may be studied by auscultating a lobe of lung solidified by pneumonia, after death, employing artificial respiration by means of the bellows, as already stated. Air enters readily into the bronchial tubes of a solidified lobe, and bronchial respiration may be produced by a current of air directed into a primary bronchus, as well as into the larynx or trachea. It is, however, probable that this sign in life is produced chiefly by the condition of the laryngo-tracheal respiration into the solidified lung, the medium of the conduction being chiefly air within the pulmonary bronchi. After death the sign is notably diminished over a solidified lobe if the primary bronchus be obstructed by a plug of cotton or wool.

The existence of a cavernous respiration with well-marked distinctive characters may be demonstrated out of the body. German authors, following Skoda, consider cavernous and bronchial respiration as identical in respect of their intrinsic characters, and the differential points were indicated in an essay published in 1852. The inspiratory sound in the cavernous respiration is low in pitch and hollow or blowing in quality. The expiratory sound has the same quality and is still lower in pitch. If the statement of these points of contrast with bronchial respiration be correct, the two signs need never be confounded with each other. That the statement is correct may be shown, in the first place, by a purely artificial production of cavernous respiration. Take an indiarubber balloon of the size of an orange, with thin walls and an opening at each end connected with an indiarubber tube. One of the tubes should be long enough to extend from the mouth to the ear. Applying the balloon to the ear, covering it with the hand, and with the mouth alternately inflating it and withdrawing the air from it by suction, the characters of the cavernous respiration are illustrated. The bellows may be used instead of the mouth, or the instrument known as Davidson's syringe. The cavernous respiration as thus produced may be contrasted with the bronchial respiration as illustrated by a current of air in the indiarubber tube employed in the foregoing experiment. The sign may, in the second place, be demonstrated by obtaining a specimen of phthisical lungs in which there is a cavity of considerable size near the periphery and not surrounded with solidified lung. By inflating the cavity and withdrawing the air from it by means of the bellows or Davidson's syringe, and applying the binaural stethoscope over the cavity, the cavernous respiration which existed during life may be reproduced.

All are familiar with the imitation of amphoric respiration by blowing over the mouth of a phial. The musical intonation is also produced by blowing into an indiarubber bag of considerable size already inflated. I have found this sign well marked on inflating with the bellows a phthisical lung, and been led thereby to discover, by incision, a cavity in the centre of the lobe surrounded by solidified lung.

The sign which I have called the *broncho-vesicular respiration* embraces the abnormal respiratory sounds to which have been applied the names *rude*, *harsh*, *rough*, and by German writers, following Skoda, *indeterminate respiratory murmurs*. The morbid physical conditions represented by this sign are all the varying degrees of solidification of lung falling short of a degree sufficient to give rise to a purely bronchial respiration. The varying characters of the sign denote the degree of solidification—that is, whether it be slight, moderate, or nearly sufficient to be represented by the bronchial respiration. The name broncho-vesicular expresses a combination of the characters belonging to the vesicular and the bronchial respiration. In the inspiratory sound the vesicular and the tubular qualities are combined in different proportions. Either the vesicular or the tubular quality may predominate. The pitch is low or high according to the predominance of the vesicular or the tubular quality. If the vesicular quality be predominant, the solidification is slight; if the tubular quality predominate, the solidification approximates more or less closely to that represented by the bronchial respiration. The expiratory sound is always prolonged and raised in pitch. The length of the expiratory sound, its intensity and the elevation of pitch, are proportionate to the predominance of the tubular quality in the inspiratory sound—or, in other words, to the degree of solidification.

The broncho-vesicular respiration cannot be artificially illustrated. It may, however, be studied by auscultating either human lungs removed from the body, or the lungs of the calf or sheep. Imitating respiration by means of the bellows, and applying the binaural stethoscope on the upper part of the lungs over the large bronchi, the characters of the sign are observed as contrasted with the vesicular murmur in other situations. The sign is, in fact, present in life over the large bronchi. It has been known as the normal bronchial respiration; but as the characters are not those of a purely bronchial respiration, a more correct term is the *normal broncho-vesicular respiration*.

ADVENTITIOUS SOUNDS OR RALES.

The important signs following in this division are the *moist bronchial* or *bubbling râles* (coarse, fine, and subcrepitant), the *dry bronchial râles* (sibilant and sonorous), the *crepitant râle*, *metallic tinkling*, and *pleural friction sounds*.

The moist bronchial or bubbling râles are artificially illustrated by indiarubber tubes differing in size. After forcing water, or any liquid, through the tubes by means of Davidson's syringe, there remains enough to give rise to these râles for some hours on passing a current of air either from the syringe or mouth through the tubes and holding them close to the ear. The bubbling sounds thus produced are coarse or fine according to the size of the tubes. The subcrepitant râles are produced within a tube of extremely small size. These râles may also be illustrated in lungs removed from the body, by introducing within the trachea water, or some other liquid, and imitating respiration by means of the bellows. If the quantity of liquid introduced be not large, it is quickly driven into the bronchial tubes of small size, and fine bubbling sounds over the subcrepitant râles are produced. Coarser bubbling sounds are produced by the introduction of an additional quantity of liquid. If liquid be introduced, after death, into the bronchial tubes within a pulmonary lobe completely solidified, or in the second stage of pneumonia, the high pitch of the bubbling râles may be observed in contrast with the low pitch of râles produced within healthy lobes.

The dry bronchial râles may be produced by constricting abruptly the calibre of indiarubber tubes of small or moderate size, using for this purpose ligatures, or making compression with a pair of forceps or tweezers. It is, however, not easy to hit the proper amount of constriction. A current of air through the tubes may be produced by the bellows over the mouth, the tubes at the points of constriction being held close to the ear. The mechanism of the râles is in this way demonstrated, but I have not succeeded in illustrating them so as to approach to their abundance in cases of asthma. This, perhaps, might be done by getting together a number of tubes properly constricted at certain points.

The crepitant râle is well illustrated in various ways, with which every student of auscultation is familiar, such as rubbing a lock of hair close to the ear, throwing salt upon coals of fire, igniting a train of gunpowder, &c. The best illustration was afforded by an article made some ten or twelve years ago, of indiarubber, to be used as a sponge Pressing this article close to the ear, and allowing it to expand, the imitation was as perfect as possible. This mode of illustration exemplified the mechanism — namely, the production of the dry crackling sounds by separation of bronchioles and alveoli in the act of expiration, which had become agglutinated by an adhesive exudation at the end of the expiratory act. An American writer, Dr. E. A. Corrwas the first to give this explanation of the mode of pro, duction of this râle in a communication published in the *American Journal of the Medical Sciences*, October, 1842. An article analogous to that just referred to is still in use by artists, and is known as the indiarubber sponge; but something is now combined with the indiarubber which renders it more useful as a sponge, but impairs its usefulness for the representation of the crepitant râle.

Metallic tinkling is very satisfactorily illustrated by means of the indiarubber bag of the foot-ball. Introduce into the bag half a pint or a pint of water; hold the bag so that the opening is dependent, and, by means of Davidson's syringe, introduce air so that bubbles will escape from the surface of the liquid. Holding the bag close to the ear, the escape of the bubbles gives rise to tinkling sounds. Invert the bag, and holding it quickly to the ear some tinkling sounds may be produced by drops of liquid from the upper part upon the surface of the liquid. The bag should be well inflated for the sounds to be produced. The sounds may be produced by shaking or percussing the bag when held close to the ear. But the best illustrations are produced by connecting the bag with an indiarubber tube of considerable length, and, after the passage of the liquid through the tube, enough remains to give rise to tinkling sounds for several hours on blowing through the tube and holding the bag close to the ear. In the last experiment it is not necessary that the bag contain any liquid. It should, however, be made tense by inflation. These different modes of producing illustrations of metallic tinkling represent corresponding physical conditions giving rise to the signs in connexion with pneumothorax and large tuberculous excavations.

Pleural friction sounds are imitated by rubbing together the palms of the hands, and by placing over the ear the palm and moving the finger over the dorsal surface of the hand.

VOCAL SIGNS.

The signs pertaining to the laryngeal or loud voice are *bronchophony*, *simple increase of vocal resonance*, *ægophony*,

and pectoriloquy. None of these signs can be artificially illustrated, but, with perhaps one exception (ægophony), they can be readily produced in lungs removed from the body. Bearing in mind that the essential characters which distinguish bronchophony are elevation of pitch and nearness to the ear, intensity not being essential, this sign may be reproduced after death as follows: Remove the lungs from a subject dead with pneumonia, one lobe at least being solidified. Into the trachea insert the end of a tube nearly as large as the trachea, the other end of the tube being provided with a mouth-piece large enough to receive the lips. What is known as "Holden's resonator" is well adapted for these experiments. Now an assistant is to direct his voice into the speaking-tube, and the solidified lung is auscultated with the binaural stethoscope. The transmission of the voice gives rise to the bronchophonic modifications, the intensity being less than during life. Comparing the voice-sounds over the solidified lobe with those over a healthy lobe, the latter are found to have the distinctive characters of the normal vocal resonance—namely, diffusion and distance from the ear. The intensity of the voice-sound over the healthy lung is greater than over the solidified portion, showing that a healthy lung containing more or less air is a better conductor of sound than solidified lung. Experiments seem to me to prove conclusively that Laennec was in error in making the reverse of this statement. That the conduction of the voice-sounds into solidified lung is largely by the air contained in the bronchi, is shown by comparing the transmission when the trachea is unobstructed with that when it is plugged with cotton or wool. This comparison suffices to disprove the statement by Skoda and others, that the bronchi within a solidified lobe do not contain air. That air enters freely into the bronchi is shown by blowing, with the mouth or bellows, into a tube inserted into either the trachea or the bronchus leading to the solidified lobe. Normal bronchophony may be illustrated, in healthy lungs, by comparing the voice-sounds over the large bronchi near the apex with those over the lower portion, an assistant speaking into a tube inserted into the trachea.

The characters which distinguish from bronchophony simply increased vocal resonance are to be clearly apprehended. In the latter sign the resonance is increased in intensity without the modifications essential to bronchophony—namely, elevation of pitch and nearness to the ear. Increased intensity without these modifications either denotes solidification of lung not sufficient in degree to give rise to bronchophony, or it denotes a cavity. The sign may be illustrated in the same way as bronchophony, over a lung partially solidified, or over a tuberculous cavity. A tuberculous cavity after death, as during life, may give intensely increased vocal resonance without the bronchophonic characters; this is when the cavity is large, near the surface, and not surrounded by solidified lung. Increased vocal resonance, not bronchophonic, within a circumscribed area is often a valuable cavernous sign.

Ægophony has one of the essential characters of bronchophony—namely, elevation of pitch. It lacks the other essential character—namely, nearness to the ear. Other distinctive characters are tremulousness, bleating, and the nasal intonation. The high pitch and distance from the ear are obtained by placing beneath the stethoscope, in a situation in which bronchophony is well marked, a bag of liquid; but the additional characters are not in this way produced. I have no practical knowledge of any mode in which complete ægophony may be produced out of the body. The conditions in life may be imitated by placing within an india-rubber bag lungs with a solidified lobe, introducing into the bag a certain quantity of liquid, and auscultating, while an assistant speaks into a tube inserted into the trachea. This experiment I have not tried. The interest belonging to this sign relates chiefly to the mechanism of its production; for, with the other signs denoting pleuritic effusion, together with the exploratory needle, the sign cannot be said to have much practical importance.

Pectoriloquy is often confounded with bronchophony. All confusion is avoided by defining pectoriloquy to be the transmission of *speech*—that is, not merely the voice but articulated words. As thus defined, pectoriloquy may perhaps be illustrated over a solidified lung by speaking into a tube inserted into the trachea. I have not succeeded very satisfactorily in two instances in which I have tried to illustrate it in this way; but the instances have been few. It would be of interest to ascertain whether the sign may be illustrated as heard over a solidified lung and over a cavity not surrounded with solidified lung. The object would be to verify out of the body an important practical distinction pertaining to this sign during life. The distinction is one which I believe I was the first to indicate. It is this: If pectoriloquy be accompanied by the distinctive characters of bronchophony the conduction of the speech is through the solidified lung; but if the characters of bronchophony are wanting the pectoriloquy is a cavenous sign. By means of this distinction it is practicable, in cases of disease, to determine whether the sign denotes solidified lung or a cavity.

WHISPERING SIGNS.

A series of signs produced by the whispered voice was arranged by me, and the different signs (pectoriloquy excepted) named in 1856. The whispered sounds of health were embraced under the name *normal bronchial whisper*. The morbid signs, correlative to those produced by the loud voice, were called *whispering bronchophony, increased bronchial whisper, cavernous whisper, whispering pectoriloquy* and *amphoric whisper*. It is unnecessary to describe the differential characters of these different signs, inasmuch as they are those which belong (following the same order of enumeration) to the expiratory sounds in bronchial respiration, broncho-vesicular respiration, cavernous respiration and amphoric respiration. Pectoriloquy is, of course, excepted. The experience of many years has confirmed the opinion that these signs are often serviceable in the practice of auscultation; albeit their analogues are to be found in the respiratory signs just named. The distinctive characters are brought out more fully and distinctly by the whispered voice than by the expiratory acts in respiration. The whispering signs may be fairly represented by means of diseased lungs removed from the body, an assistant speaking in a whisper into the trachea, and the stethoscope placed over portions of lung in different degrees of solidification, over cavities with their walls near the surface, and over cavities surrounded by solidified lung. Let me add, that the characters distinctive of whispering pectoriloquy as a sign, on the one hand, of solidified lung, and, on the other hand, of a cavity, are not less marked than those of pectoriloquy produced by the loud voice. If whispered words transmitted through the chest are accompanied by a sound high in pitch and tubular in quality (whispering bronchophony), the conduction is through solidified lung; but if the word sound be low in pitch and non-tubular (cavernous whisper), the conduction is through a cavity.

I have given, gentlemen, a succinct account of the production, out of the body, of pulmonary signs obtained by auscultation and percussion, for reasons which were stated at the beginning of the lecture. I do not profess to be an adept in devising methods for the illustrations of these signs. I doubt not, that many of you, by the exercise of your ingenuity, will be able to do better than I have done. Efforts in this direction, as it seems to me, will be likely to be more useful than attempts to elucidate the physical signs by resorting to abtruse principles of physics. It would be easy to show that the latter method of investigation has led to important practical errors. The physical elements involved in certain of the signs are too varied and obscure to be embraced in mathematical calculations. This difficulty does not apply to experiments having for their object the imitation of the physical conditions which the signs represent, and to those made upon the lungs, healthy and diseased, after death. Teachers of auscultation and percussion will, I am sure, find much advantage in producing the signs out of the body in the class room, in conjunction with clinical illustrations, and I hope hereafter to be able to do more in this way than I have done during the present session.

THE EARLSWOOD ASYLUM FOR IDIOTS.—At the annual court and spring election of this charity, held lately, it was stated that the board of management intended, in many cases, to extend the age of candidates for election, not restricting them to the age of sixteen when first applying. The present number of inmates is 562, and the number applying for admission was 152, 30 of whom were to be elected. The financial condition of the institution was satisfactory, as there was only £200 difference between the receipts of 1882 and those of 1881, instead of a serious deficiency as had been expected. A special appeal was made for increased subscriptions in order that the benefits of the charity might be further extended.

NOTES OF

TWO UNCOMMON CASES OF ABSCESS OF BONE.

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EVER since Brodie directed attention to the subject, surgeons have learnt to recognise the characters of abscess of bone. We are now familiar with its more common forms, but varieties of this affection occasionally occur which have been hardly noticed. In certain instances not only is pus found in a well-defined cavity, but also a sequestrum lying loose in the fluid. Such a state of things may be understood without difficulty. The inflammation here has produced not only suppuration, but the death, also, of a considerable fragment of bone. But the following two cases are examples, I believe, of a still more rare condition.

A man, thirty years of age, not very robust, was admitted into the hospital in November last, complaining of much pain in the upper part of the left tibia, from which he had suffered for the previous six weeks. He described the pain as deep seated and dull, but variable. There was general enlargement of a portion of the bone, most marked at the junction of the upper and middle third. At this part the limb measured an inch and a half more than the opposite one. Here, over the tibia, and adherent to it, was a longitudinal scar, some three inches long, on the surface of which was a small aperture, and from this two or three drops of pus occasionally exuded. He gave the following history. Sixteen years ago he was struck on the left shin by a cricket ball. After a while the bone became painful and the leg began to swell, but for some years he did not suffer much. Seven years after the accident all the symptoms became aggravated and pointed clearly to an abscess in the tibia. Nine years ago I trephined the bone and exposed an abscess about three inches in length. The wound gradually closed, and for five years after the operation the man was free from all trouble, but about four years ago the bone again became painful, and then some pus escaped from the site of the old wound. The chief features of the case since that time he very clearly described, and his description was confirmed by what was observed in the hospital. After a period of freedom from suffering he would be troubled for some days with severe pain in the part, which gradually increased up to a certain pitch, and then almost suddenly ceased. This cessation would be marked by the formation of a small abscess in the scar, which would burst, discharge, heal, and leave him free from pain for some weeks, when it would begin again, and lead up to an abscess as before. When the scar was reflected from the surface of the tibia, a very small indentation was observed in the centre of the prominent bone, and here, by the aid of a fine probe, a minute aperture was discovered, only just large enough to admit it, which led, at some depth, to a cavity in the interior. This was opened and found full of pus, holding about two drachms. The state of things was then clear enough. It was a case of abscess in the tibia, but with the striking fact that it communicated with the exterior by a fine canal, and this explained the peculiarity of the symptoms. They were not of the urgent and characteristic kind usual in cases of abscess of bone, for when the cavity became filled, tension was relieved by the escape of pus from time to time to the surface. The question how such a condition had been brought about is more difficult to answer. Was this fistulous tract the remains of a process by which this abscess had, during its course, made its way to the surface, as in the instances mentioned by Mr. Carr Jackson?[1] In the history of this case there was no evidence of this. Had it been the result of incomplete repair after the first operation? It is hard to understand this with a period of five years' absolute freedom from all trouble. But if not, how came such a delicate fistulous passage to form? My view is that repair after the first operation could never have been thorough and complete.

A delicate girl, eighteen years of age, was admitted into the hospital on the 15th of last January, with the following history:—Her health had been good until seven years ago, when she struck the right shin. This was followed by inflammation of the knee-joint, and mischief in the upper part of the tibia. Abscesses followed, and at length several pieces of dead bone were removed from the shaft. She recovered from this. The wound healed and remained sound until a fortnight before admission, when dull, aching pain began in the site of the old injury, and increased until the day before she came to the hospital, when matter was discharged with much relief. In front of the upper part of the right tibia was an irregular scar, about two inches long. Near the centre of this was a small sinus discharging a little thin pus. At this part there was a general enlargement of the bone, ill defined, with a smooth surface, but indented under the scar, which was adherent to the periosteum. There was great tenderness on pressure over the scar. There were other scars of previous abscesses in the limb, one over the inner condyle of the femur, and another just above the internal malleolus. The scar was dissected back, then on the surface of the bone a very minute orifice was seen, too small to admit a probe, through which a drop of pus exuded. With a drill this was enlarged, and the cavity of an abscess was exposed in the shaft of the bone. It was regularly oval, with perfectly smooth walls, about an inch in length, filled with pus. Again, in this case how can the formation of the slender fistulous canal be explained? Could it have remained since the first operation, or had it been produced at some subsequent period? It seems to me that neither view can be accepted without difficulty. We are certainly not familiar with these extremely minute fistulous tracts in the substance of bone. But the clinical features of these cases are very remarkable. With many of the usual signs of abscess of bone, one—perhaps the chief—intense and long-continued pain, admitting of no relief, and rising at times into great agony, was wanting. And the explanation of its absence is easy. The pain of such an abscess is due to its tension, and here, as the pressure from the accumulation of pus increased, the fluid found vent to the surface with corresponding relief.

[1] Circumscribed Abscess of Bone, 1867, p. 25.

ON A CASE OF

OBLITERATION OF SUPERIOR VENA CAVA.[1]

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CHARLES R——, aged thirty-four, third officer of an Ocean steamship, entered hospital on the 27th of June, complaining of great shortness of breath and a feeling of fulness in the head. He said that twelve months previously, when lifting a heavy weight, he felt something give way in his chest; this was immediately followed by severe dyspnœa and weakness, and he was obliged to give up work for a time. He soon became better, but for six months after this he had occasional attacks of dyspnœa, very severe at times. He also had pain in the region of the heart, extending to the left shoulder. The severe symptoms then abated till about four weeks ago, when he became much worse. When ascending the gangway of the ship he suddenly felt "as if he would smother," and coughed up a small quantity of blood. He soon became easier, but still had considerable dyspnœa on exertion. Four days ago his breath became very short; he felt a fulness in the head and had slight pain extending down each side of the neck. He said he never was a hard drinker, but he had the appearance of a man who had lived well. No history of syphilis. The chest and other parts of the body presented spots of enlarged capillaries. Heart sounds perfectly clear. No perceptible impulse at the apex. There were swelling and tenderness on each side of the neck, just over the great veins; no enlargement of glands; no pulsation in supra-sternal notch. Laryngoscopic examination gave negative results. Breathing appeared rough at apex of both lungs; percussion note was clear over both lungs, and breath sounds heard distinctly. No increase in liver or spleen dulness. When sitting up could breathe fairly well, but the slightest exertion in lying down caused urgent dyspnœa. He had had a slight laryngeal cough, though not

[1] A paper read before the Medico-Chirurgical Society of Montreal, Dec. 8th, 1882.

of a clanging character. Urine normal in amount, and contained no albumen and no casts. Temperature normal; pulse 84. Ordered a purgative and nitrite of amyl (three minims) inhalation when the dyspnœa became severe.

June 30th: Passed a very bad night; great difficulty in breathing: eyelids œdematous; considerable lividity of the right ear; no alteration in physical signs. Ordered thirty grains of iodide of potassium three times a day.

July 4th: Complained of great tenderness on the right side of the neck, behind the posterior border of the sterno-cleido-mastoid muscle; no improvement in the breathing. Ordered the painful parts of the neck to be smeared with equal parts of glycerine and extract of belladonna; also a saline purge. —11th: The tenderness in the neck had disappeared, but the dyspnœa was very great; face œdematous and ears livid; a little œdema of the scrotum.

Aug. 4th: Percussion note over the heart and lungs, which previously had been found quite normal, was dull below the nipple on the left side; directly outside the nipple the breathing was blowing; behind on the left side the percussion note was dull up to an angle of the scapula, with weak breathing over the dull area; an occasional moist râle was heard behind; breathing not altered over the right lung. Increased lividity of the face; eyes quite closed from the swollen condition of the lids; no œdema of scrotum.—6th: Patient felt easier; was able to lie down and sleep; breathed comfortably when he kept quiet.—13th: Dyspnœa very urgent; face much swollen; ears livid; some œdema about the arms and chest; percussion note dull on left side below nipple and in lower axillary region. An aspiratory needle was introduced in the axillary line at the eighth rib, and four ounces of clear fluid removed, with relief to breathing for some hours.—23rd: Considerable œdema and lividity of face; on left side in front the percussion note was dull from the second rib to the base of the lung, the dulness extending to the posterior axillary line and also across the sternum two inches beyond its right edge; behind the note was clear. Good vesicular breathing was heard over the entire back and above the second rib in front; below this point no breath sounds were heard, nor in the axillary region. Tactile fremitus was diminished. The heart's impulse was not seen; but the apex beats were in normal position as fixed by stethoscope; sounds clear, but distant. The left side of the chest was aspirated with a fine needle in the fifth interspace directly outside the nipple line, but no fluid was obtained; the same interspace in the line of the axilla was tried, and seventy-six ounces of clear yellow fluid were removed. After the tapping the percussion note became clear down to the seventh rib in front and in the axillary line, and was clear behind. Breath sounds more distinct, and a grating friction sound was heard in the previous dull area. The breathing became easier for a few hours, but towards night the patient began to cough and said he felt a gurgling in the throat; he did not lie down the whole night, and the next day the lividity and dyspnœa were as bad as before.—28th: Again aspirated, and forty-four ounces of fluid were removed from the left side.

Sept. 1st: The chest again filled with fluid; the left pleural cavity aspirated, and fifty ounces of fluid were removed. This state of affairs continued for over a month, the chest filling with fluid and causing urgent dyspnœa. This was relieved every second or third day by tapping with an aspirator, usually in the axillary line. Occasionally the right side of the chest was aspirated, but did not give the same relief as the left side. The amount of fluid removed at each aspiration varied from twenty to seventy ounces. The fluid never showed any tendency to become purulent, but was a little bloody on one or two occasions. The urine was repeatedly examined during the course of the disease, and was never found to contain albumen. He never had any œdema of the legs, and, during the last six weeks, no œdema of the scrotum. At no time was there any ascites. The face was often excessively swollen and very livid, and there was also pitting on pressure on the sternum.

Oct. 9th: The distress in breathing was so great that a Southey's cannula was introduced into the left pleural cavity through the seventh interspace in the axillary line; a piece of fine rubber tubing, previously filled with carbolic acid lotion, was attached to it by one end, the other end being immersed in a vessel containing lotion. In this way the fluid was drained away, and the patient felt some relief; but on the following day the cannula came out. It was again introduced on the 11th, but after a short time the tubing appeared plugged with coagulum, and the fluid ceased to flow away. Previous to this the pulse had never been over 104, and the temperature had been normal. On the evening of the 11th he complained of pain in the left side, and felt feverish. On the 12th a hot poultice was applied to the side which was still painful. The tongue became furred, the pulse rapid (116); temperature 102° F.; respiration 38. The distress in breathing was extreme. Both the pleural cavities were now aspirated; from the left side twenty ounces of bloody fluid were removed, and from the right forty ounces of clear limpid serum. This relieved the dyspnœa, and caused the lividity to disappear for a short time. On the 13th the patient became much worse: respiration 50; pulse 120; temperature 103° F. Towards night he became much weaker, dyspnœa severe, and finally drowsiness supervened with cyanosis. At 11 P.M. he died. The whole amount of fluid removed from the chest by aspiration was 862 ounces, the greater portion coming from the left side.

Autopsy by Dr. OSLER.—The body was that of a large stout man. The face and upper extremities were swollen; the face was very livid. On opening the thorax a large quantity of fluid was found in the right pleura; in the left there was not so much, and the membrane was covered with recent lymph. In the anterior mediastinum, between the aorta and the right lung, there was a thickening of the tissues, and a firm, cord-like structure extending towards the root of the neck. In the right auricle were blood and clots, and there was considerable distension of the chamber. The superior vena cava was found to be obliterated. There was a funnel-shaped projection of the auricle towards the region of the obliterated vessel. There was a valvular opening between the auricles. On section of the vein it was found converted into a firm fibrous cord, the ultimate result of a thrombus in the vessel. Organised thrombi extended into the innominates and internal jugulars. There was nothing special in the other chambers. The left ventricle was large, and the walls thick. The right branch of the pulmonary artery was a little compressed beneath the fibrous cord. The left lung was much compressed, and sodden at the base, and contained much blood. The pleura was covered with fibrinous exudation. The right lung was also compressed. The azygos veins were much enlarged. There was nothing special in the abdominal organs. A large number of sections from various parts of the thrombosed vessels were made by means of the freezing microtome, for the purpose of microscopical examination. The most interesting were those taken from the vena cava superior, especially those from its cardiac extremity. On examining one of these with the naked eye by means of transmitted light it showed a deep staining, three millimetres wide, which involved not quite the entire circumference of the vessel, whilst the lumen of the vessel itself, which could be distinctly seen filled with clot, was considerably reduced in size (six millimetres). On examining beneath the microscope this staining was seen to be composed of dense cicatrised tissue, involving the coats of the vein and extending quite up to the intima. This cicatrised condition extended upwards along the course of the vessel about one centimetre, where the lumen of the vessel became slightly greater, and its walls resumed their normal thickness. The thrombi of the vena cava were more highly organised than were those in the jugulars. These specimens are interesting as showing the process of organisation of thrombus. All the sections exhibited transverse sections of, comparatively speaking, large vessels, some of which, doubtless, were in direct communication with the blood in the thrombosed vein.[2] In some of the specimens extremely delicate vessels could be traced, whose course extended from a considerable distance within the walls of the vessel to far into the clot. There were new vessels which had been developed from vessels in the walls of the vein itself. Baumgarten considers this alone to be the true source of the vascularisation of clot. The results of the autopsy, I need scarcely say, were quite different from what had been expected. The symptoms during life pointed to obstruction of the large veins, due to some growth or aneurismal dilatation exercising pressure on the vessels. Phlebitis affecting both jugulars was easily recognised, and treated accordingly, and had been considered as the effect of pressure on vessels below. That there had been an inflammatory condition of the jugulars and large veins below there was no doubt whatever. The complete absence of any growth and the condition of the walls of the vessel at its origin point rather to a primitive

[2] THE LANCET, vol. ii., 1878, p. 857, quoting Baumgarten.

phlebitis beginning in the adventitia, which resulted in structural changes in the vessel. Structural change in the intima has unavoidably associated with it more or less thrombosis. On comparing the thrombi from different regions, it will be seen that those of the jugulars were of recent formation, whilst those from the vena cava were of a much older date; the thrombus was completely organised and the vessel walls had contracted on it. The accumulation of fluid in the pleura was evidently only a slight factor in the breathlessness.

It is a debateable point whether or not the bronchial and pulmonary vessels anastomose. Cohnheim[3] and Litten deny that there is any communication between the two. Virchow, Hippolyte-Martin, Rindfleisch, Kuttner, and others are even more positive in asserting to the contrary. Hippolyte-Martin[4] says, "After having rapidly opened the thorax in a guinea-pig and placed a ligature upon the trunk of the pulmonary artery at its origin, we have injected Prussian blue gelatine through the abdominal aorta; the colouring matter could penetrate into the pulmonary vessels by the bronchial arteries." He adds, however, "Upon section of the organ it was easy to see that the alveolar capillaries were but partially injected." I think we may accept the view that the vessels do communicate; we would then have these vessels considerably dilated, and this permanent dilatation means really thickened walls; conditions less favourable to the interchange of gases in the pulmonary capillaries and consequently accounting for the dyspnœa; the thickened walls of the septa would also impede free interchange of the gases. Another condition which, on purely physical reasons, I believe to have been a sufficient cause for the great distress in breathing is the permanency of the foramen ovale which was present in this case. This abnormality may exist without any disturbance of circulation—that is, so long as you have the auricle filling from above, the direction of this current being over the annulus ovalis will keep it in contact with the fossa ovalis, thus closing the orifice and preventing blood passing directly from the one auricle to the other. As soon, however, as the blood coming from the superior vena cava is shut off, the blood rushing upward from the inferior vena cava must naturally get beneath the annulus ovalis into the left auricle, which would be a most unfortunate circumstance for an over-distended pulmonary circulation.

To account for the fluid in the pleura, before any inflammatory attack developed itself, we will examine a little more minutely the vessels implicated. Thrombi were found in the superior vena cava, right and left innominate veins, internal jugulars and inferior thyroid veins. This would involve, besides the vessels of the head and neck and both arms, all of which were œdematous for a considerable time, four large intercostal veins on the left side, one intercostal on the right, the left bronchial vein, besides the internal mammary and some other smaller vessels, all of which reached the heart through the superior vena cava; thus, most of the blood from the left thoracic cavity emptied itself into the left innominate vein. Now, Sotnischewsky[5] proved by experiments at the Pathological Institute of Leipzig four years ago, that tying the veins is not of itself sufficient to cause œdema; that it requires that the vessel should be in a thrombosed condition in order that no possible collateral circulation could relieve the congested vessels. I regret, when the autopsy was made, that I was not aware of these facts. However, the autopsy affords quite sufficient evidence of the cause of this effusion. The fluid blood from the regions in which the thrombosed vessels lie must reach the heart by way of the inferior vena cava; so must, also, certainly a portion, if not all, of the blood of the bronchial vein. It can only do so by widening of the inosculations of the superior intercostals with the fifth and inferior intercostals and azygos veins on the left side; on the right side by way of the azygos major; also by the superficial epigastrics and possibly the renal vessels on both sides.

Whatever the nature of the initial lesion may have been, I think there can be little doubt the lifting a heavy weight twelve months previous to entering the hospital was associated with it, and that it was of an inflammatory nature in the region of the vena cava—probably commencing in the adventitia—the inflammation assuming a chronic character. With the further progress of this inflammatory condition thrombosis occurred, as yet not completely obliterating the vein. The coughing up of blood I would suppose to have been the result of strain in this way:—The calibre of the vena cava has been diminished by conditions just described. Some blood would still be streaming through it, but in greatly diminished quantity; the upward current from the inferior vena cava would be much the stronger of the two. With the slightest extraordinary effort it would get beneath the annulus ovalis and permit of the blood entering the left auricle, and thus delay the blood in the lungs. Rupture of some of the capillaries in the lungs could easily take place.

If my theory be correct, a history of the succeeding pathological processes becomes a simple matter. We know that when we have coagulation taking place in a vein as a result of injury it very frequently causes other coagula to be formed, and eventually inflammation of the walls of the vessels, or should any inflammation have been previously present, these processes are still further intensified. The symptoms which were present point conclusively to at least two, if not three, well-marked extensions of the affection which might be interpreted thus:—As soon as the primary lesion caused closure of the vena cava, thrombosis occurred up to the vena innominata, causing disturbance of circulation, cyanosis, and other symptoms. This condition would be gradually relieved by collateral circulation, by way of the intercostals and azygos veins, and also by the internal mammary and superficial epigastrics; the phlebitis continuing, thrombosis would extend higher up, consequently the blood would have to seek other channels than those established by way of the internal mammary and intercostals, &c., to reach the azygos veins.

Montreal.

[3] Virchow's Archiv, Bd. lxv. [4] Archiv de Phys., t. vii.
[5] Virchow's Archiv, Bd. lxxvii., S. 85.

THREE CASES OF CILIA IN THE ANTERIOR CHAMBER.

BY CHARLES E. GLASCOTT, M.D.,
SURGEON TO THE MANCHESTER ROYAL EYE HOSPITAL.

ON the 23rd of last September a case was published in THE LANCET by Mr. Williamson of the Newcastle Infirmary, in which a few lashes were removed from the anterior chamber after a presumed residence there of about three weeks. As very few cases of a like nature are recorded, it occurred to me that it might be desirable to supplement Mr. Williamson's case by the description of three cases in which I have found cilia in the anterior chamber, at periods varying from one week to three years after injury to the globe. It is worth noticing that in all three cases the rupture of the cornea had been caused by the impact of a blunt-edged substance striking from above; the lashes in all my cases, on examination, were found to be entire, as if they had been forcibly pulled out by the roots; their exit from the anterior chamber with the first gush of aqueous humour had no doubt been prevented by the elasticity of the edges of the cornea wound closing upon them, by the prolapse of iris, and by the subsequent healing of the wound. It is interesting to note that in two cases an attempt had been made by nature to extrude the foreign bodies through a fistulous opening in the wound, in the axis of their longest diameter. These cases also point to the advisability of using lateral or oblique illumination in the examination of all cases of injury to the eye as a matter of routine, for without its aid the cause of the irritation would certainly have been overlooked.

On Jan. 12th, 1870, G. G——, a young engineer, was in the act of shutting the door of a broken lamp which was swinging in the wind, when a large, irregular piece of plate glass fell out and injured his right eye, cutting the globe across at its outer sclero-corneal junction. He at once put his handkerchief to his eye, and keeping it firmly compressed he hastened to the Salford Hospital, where he states he was treated by means of cold water compresses, without the lids being opened. He suffered much pain the night of the injury, and slept very little. On the 17th he came under my care at the Royal Eye Hospital, when I found that there was an almost horizontal wound two lines and a half in length, at the outer sclero-corneal junction of the right eye, the lips of the wound being in close apposition, except at the outermost margin, where there was a small prolapse of iris. The anterior chamber was quite full of blood, so that the amount of injury to the deeper structures could not be made out. Atropine was instilled several times, with the effect of making him "feel much easier," and a pad and compressive

bandage were applied. He continued the use of atropine drops and bandage for about three weeks, by which time most of the effused blood had become absorbed, and the wound had healed, leaving a minute fistulous opening close to the outer angle. Vision was reduced to counting fingers at two inches and a half. Three days later I saw him again, when he complained of a pricking feeling in his eyelids, as if there was something in his eye. Suspecting atropinisation, I everted his lower lid, and was about to examine the upper one for granulations, when I observed a small, black point projecting through the fistulous opening referred to above. On seizing it with a pair of forceps, it readily came away, and the patient expressed himself relieved. On examining the foreign body it proved to be an eyelash, slightly swollen by its immersion in the aqueous humour. This led me to examine him ophthalmoscopically, and by oblique illumination, by the latter method I was enabled to see a number of cilia bridging across the anterior chamber, and resting against the anterior surface of the lens. By some manipulation I induced a few more of the cilia to present themselves at the wound, and drew them out with the forceps. They were mostly adherent to one another in bundles of twos and threes, and I succeeded in removing fourteen; I then used atropine, and reapplied the bandage. Since their removal he has had no lacrymation or uneasiness whatever; the wound has closed, and he says his sight is returning. Two months later the site of the wound was occupied by a dense linear cicatrix, and although the lens capsule was partially opaque, he could make out letters of No. 6, Jaeger, at five inches. I may here remark that the affected eye was an amblyopic one before the accident, and squinted outwards, so that he feels very little inconvenience from the result of the injury. The patient stated that his eye was perfectly comfortable, and I found there was no tenderness on pressure. I have just seen my patient after a lapse of twelve years, and I find the eye unchanged. His vision is No. 6 with the right eye, the refraction being myopic, and the sight of the left is $1\frac{6}{9}$. Although the wound was over the ciliary region, he has had no irritation in the eye, or tendency to sympathetic trouble.

My second case occurred in the person of M. S——, a young mill hand, who was injured by a young man throwing a piece of a broken bobbin at her from across the room, hitting her on the right eye, causing an irregularly shaped wound across the cornea, with a slight prolapse of iris. The wound healed rapidly under ordinary treatment, with a very slight anterior synechia. She has had several attacks of irritation in the eye, with increased tension and bulging of the wound, since, when she attempted to work, which caused her to return to the hospital. On examining the eye by focal illumination four months after the accident, I found two lashes lying saltierwise in front of the upper quadrant of the iris, the lower limbs of the St. Andrew's cross formed by the lashes being directed somewhat forward, and standing upon the posterior surface of the wound. I determined to attempt their removal, and proceeded to make an upper iridectomy, so as to include the anterior synechia as well. I managed to remove one of the lashes by means of the iris forceps, but the other disappeared, no doubt having become entangled in a blood-clot, and thus sponged away, the hæmorrhage from the cut surfaces of iris being pretty copious. The iridectomy wound healed in a few days, and the tendency to corneal staphyloma was reduced. Eight months later she visited the hospital, and reported the eye as having been perfectly quiet since the removal of the lashes, and that she had resumed her work at the mill. Vision with injured eye is now $8\frac{5}{6}$ c. + 8 sph. = $1\frac{6}{9}$. I have no doubt that the distant vision could have been further improved if the corneal astigmatism had been corrected.

Rachael B——, my third case, aged thirteen, received a blow on the right eye with a rough piece of wood, a portion of a clog sole, three years before I saw her, which wounded the lid, and ruptured the cornea above and to the inner side, causing traumatic cataract and prolapse of iris. The corneal wound healed in a month, but the eye always remained "weak and watery," and three weeks before I saw her the eye had become inflamed and painful. When I first saw her there was a dense cicatrix in the upper and inner side of the cornea, bulging forward and pierced in the centre by a minute fistulous opening through which a lash projected for about two-thirds of its length. The pupil was blocked by a dense capsular remnant, and there was a large anterior synechia. I took the girl into the hospital and performed an iridectomy downwards and inwards, removing three lashes, which were sticking in the stretched iris. The capsular remnant I was also able to remove by means of a pair of straight iris forceps. The wound healed in a few days, and the staphylomatous bulging subsided. I saw the patient recently, and found vision to be No. 6 c. + 2 and c. + 4 = $\frac{6}{12}$. There has been no recurrence of pain or irritation since the removal of the lashes.

Manchester.

THREE CASES OF

LISTERIAN OPERATION FOR THE RADICAL CURE OF INGUINAL HERNIA.

BY EDWARD LAWRIE,
PROFESSOR OF SURGERY, LAHORE MEDICAL SCHOOL.

IN the following cases the antiseptic principle was strictly carried out.

CASE 1.—A European gentleman, aged forty-four, from Phillour, consulted me on December 7th, 1882, on account of double inguinal hernia. The protrusion on the right side had existed since 1863, and that on the left since 1865. On December 11th I performed a modification of Professor K. McLeod's[1] (of the Calcutta Medical College) operation for the radical cure of the hernia on both sides. Commencing with a free exposure of the external abdominal ring, and of the hernial sac and spermatic cord for an inch or more below it, the sac was dissected clear of the cord and transfixed close to the ring with long thick double catgut ligatures, which were tied on each side. The sac was then cut across below the ligatures. The pillars of the ring were next brought together with the ends of the ligatures which held the stump of the sac. A Wood's needle was passed first through the outer end and then through the inner pillars of the ring, and threaded and withdrawn with the ends of the ligature on the outer side of the stump, and the same process was repeated on the inner side. The four ends, now holding the pillars of the ring, were tightly tied in pairs on each side of the stump of the sac, and the ring was thus effectually occluded without any undue pressure on the cord. The ligatures were cut short, and the external wound sutured with thin catgut. The patient left Lahore cured and not wearing any truss on Jan. 13th. Both wounds healed by the first intention, though the patient's recovery was delayed by a severe attack of dysentery, which developed itself on the day following the operation.

CASE 2.—A gentleman, aged forty-nine, from Amritsar, consulted me on December 30th, 1882, on account of an inguinal hernia of the right side of six years' standing. The operation was performed on Jan. 1st. The wound healed throughout without inflammation, and the patient got up on Jan. 8th. On the 14th he left for his home cured, and able to walk freely without a truss.

CASE 3.—A gentleman, aged thirty-seven, was sent to me from a distant station on Jan. 3rd, 1883, with a tumour of the right testicle and right inguinal hernia. The hernia dated from July, 1872. The tumour was as large as the closed fist, of three months' growth, and of soft consistence. The operation was performed on Jan. 5th. The abdominal ring and tumour were fully exposed by a free incision. The hernial sac was found to be congenital, and contained a mass of omentum, which was adherent to the upper surface of the tumour. The neck of the sac and its contents were transfixed *en masse* with double catgut, which was tied on each side immediately outside the ring. The sac, omentum, and tumour were amputated half an inch below this point, and the ring, with the thick stump in the centre, was occluded in the same manner as in Cases 1 and 2. A horsehair drain was employed and removed on the fourth day. On Jan. 12th the wound, with the exception of a single stitch-hole at the top, was soundly healed. The patient left Lahore on Jan. 20th, 1883, well and not wearing a truss. (The tumour proved on examination to be a soft carcinoma. It weighed fourteen ounces and was confined to the epididymis. The spermatic duct was healthy.)

The operation I have adopted for the radical cure of hernia differs from that described by McLeod in the *Gazette* in detail, though the principle is the same. The modifications

[1] Vide Indian Medical Gazette for October, 1881.

of McLeod's procedure, which I consider important, are briefly (1) non-excision of the sac and (2) occlusion of the ring, with the ends of the catgut employed for its transfixion and deligation. In this way the wound, in uncomplicated cases, is small, the catgut cannot slip off the sac, and the correct position of the stump in the centre of the ring is secured. I have recently operated in this manner on nine cases of hernia in hospital, in all of which the results were as good as in those reported. Under proper antiseptic management, without which the operation would be impossible, the wound heals at once, and consolidation of the ring is complete in from eight to ten days.

Lahore.

ON CHEYNE-STOKES' RESPIRATION.

BY F. M. PUDDICOMBE, L.R.C.P. LOND., &c.

SEEING that the above subject has been brought before the notice of the profession once more by Dr. Paterson in THE LANCET of January 20th, I venture to submit the particulars of the following case which has been under my care for some time past, and which presents several points worthy of notice.

S. E——, aged sixty-four, deaf and dumb, a brewer's labourer, with no family history, and no history of the patient's past life can be traced, with the exception that he was given to fits of intemperance. On January 29th he was brought to the Teignmouth Infirmary in a state of insensibility, the limbs motionless, and the body cold; pupils somewhat contracted but answered to light, and the pulse was slow but weak. He had been found in this condition in a yard adjoining the brewery about an hour previously. Hot bottles were applied to the feet, he having been put to bed, and soon he was able to move slightly, when it was found that he was paralysed on the right side. No reflex movements could be produced on tickling the right foot. A short time after this he resisted all attempts to feed him, and we were obliged to use force during the rest of the day in order to make him take small quantities of nourishment.—30th: Has passed a restless night, snoring loudly whenever he dropped to sleep for a few minutes. He has passed some urine in the bed, but seems to have some control over his bladder. Has taken beef-tea and milk willingly, but latterly it has returned. Has had an ice-bag applied to his head and blisters behind his ears. Although there seemed to be some improvement this morning, he is decidedly worse to-night, and is very restless.—31st: Sickness continues. Pulse is full and slow (56) this morning. Has used a bottle to pass urine in. Has retained a small quantity of beef-tea mixed with ice and lime-water. Bowels confined. Temperature 99·8° this evening.—Feb. 1st: Sickness stopped; temperature 98·6°. Seems better; appears to be conscious. The bowels have acted after an enema. Five grains of the bromide of potassium to be taken every five hours.—2nd: The same.—3rd: Rather lower this morning, but takes beef-tea and milk willingly. This evening, for the first time, my attention has been drawn to a most peculiar form of breathing. It much resembled that related by Dr. Paterson; the ascending and descending respiratory acts being well marked; the crisis, so to speak, consisting of a long-drawn, violent, and noisy respiration. Each breath was accompanied as a rule with stertor, even to the last of the descending series, the noise of the last breath somewhat resembling that made by the escape of the last water from a bath by a waste-pipe—a peculiar sucking noise. The pause would then take place, and would last from ten seconds to a minute, the duration varying greatly; the breathing would then recommence, softly at first as a rule, and then louder and louder, but sometimes it would begin again with a sudden violent and noisy effort. The number of ascending and descending respiratory acts numbered on an average seven to ten of each.

It would be superfluous to give a detailed account of the daily progress of the case. Suffice it to say that no material improvement took place; indeed, little or no alteration could be observed for many days, until, on the 19th, when, though he seemed on the whole to be much weaker, reflex movements were readily induced by tickling the feet.—24th: The pauses still continue, though not so markedly as before; they have been observed several times during the daytime for the past few days, but only when sleeping, whereas at first they were only noticed at night.—26th: The patient is much weaker. He can only be made to swallow with difficulty, and each attempt is attended with violent coughing. Only once or twice has the peculiar respiration been observed during the past twenty-four hours.—27th: The patient is very much worse, and apparently sinking fast. The character of the respiration is entirely changed; there are no pauses, but he breathes with stertor, fifty respirations to the minute. All the patient's urine since the previous day has been passed under him, and he seems quite unconscious. Feeding (beyond wetting his lips with a feather dipped in milk) is out of the question. At 10 P.M. I was called by the nurse, who said the patient was dying. His respirations were sixty in the minute. The pulse could not be felt. The breathing gradually became slower and weaker, and after a couple of pauses of about a minute each (such as may often be noticed in dying people) it finally stopped. The temperature of the body at the time of death was 102·6°. The urine could not be collected for the past two days.

Before giving an account of the autopsy I will mention several facts in connexion with the case, which, for convenience, I have hitherto omitted. In the first place, the pauses rarely were noticed in the daytime, and then only during the last few days of the patient's life, but during the night they were extremely well marked, coming on with regularity about eight or nine in the evening, and ceasing towards morning. Secondly, they never occurred when the patient was awake, but he would drop off into a nap, and after a minute or two, more or less, the peculiar form of respiration would commence. Thirdly, towards the termination of the pause twitchings would often, but not always, occur; these were noticed, of course, on the sound side of the body, also occasionally movements of the abdominal parietes might be noticed. Fourthly, shaking would not at first break the pause, but if continued it generally took effect. Sometimes on shaking him he would give a short inspiration, and again pass into a state of apnœa. On auscultation the heart sounds, which seemed normal, but rather faint, could be heard plainly alone, and in no way irregular. The pulse could be felt at the wrist beating strongly, and differing in no perceptible degree from that which could be felt during the breathing period. The commencing respiration sounded most peculiar, and could be heard through the stethoscope generally a second or two before there was any outward or visible sign of it. The urine during the early part of the case showed only traces of albumen, and had a specific gravity of 1025, acid reaction. During the latter period of the case there was a great quantity of albumen, and the urine was more scanty. There was no dropsy of any part of face, body, or legs. With regard to remedies, I found none to have much effect. Bromide of potassium and chloral hydrate were totally inert, and the more he slept the worse he was. Nitrite of amyl, on being held to his nostrils, stopped the symptoms temporarily, but only by causing him to wake up, which he invariably did after it had been held to his nose for seven or eight seconds. The nurse reported that on several occasions he was more quiet after its use for the rest of the night, but on others he was as bad as ever.

The following is an account of the post-mortem examination, made on the body the day following death. On removing the skull-cap and dura mater a quantity of fluid escaped, and the posterior surface of cerebrum and cerebellum was congested, especially on the left side. The pia mater was much injected. The substance of the cerebral hemispheres differed little, if at all, from that seen in health. On cutting into the ventricles the left was greatly distended with blood-clot, and the right contained a small clot and a great quantity of serous fluid. On washing away the clot the corpus striatum and other portions of the floor of the left ventricle were found to be much softened and disintegrated. The pons and medulla, as far as could be seen with the naked eye, were perfectly normal and healthy, and, though covered with injected vessels of the pia mater, it was white and healthy on being cut into. There was no softening or disease of any kind apparent in these latter parts. The above were the only lesions to be found in as careful an examination of the contents of the cranium as it was in my power to make. The lungs were congested and œdematous. There was but little fluid in the pericardium. The heart was hypertrophied but little if at all dilated, and the walls were firm and looked healthy, showing no evidence of fatty degeneration that could be detected with the naked eye. The aorta was of large size, but showed no atheromatous patches.

There was no valvular disease in the heart, but I found on opening the right ventricle two growths, the one about three-quarters of an inch across, embedded amongst the columnæ carneæ, and another about an inch in length and half an inch in diameter, attached by a pedicle, and hanging from the wall into the cavity of the ventricle. I also found a smaller growth in the left ventricle, attached to the columnæ. The other viscera were healthy, with the exception of the kidneys, which were both diseased, the right especially so. The granular condition was shown to a slight extent; but the principal point for notice was the presence of a number of cysts varying in size from a hemp-seed to a small marble, and containing a yellow transparent fluid. These were principally found in the cortical portion. The capsules were easily removed, but the kidney was torn at one or two points.

The above is only a poor description of the case; but I hope it may have presented some points worthy of notice, and which may be acceptable to those taking an interest in the subject.

Teignmouth.

FRACTURE OF THE PARIETAL BONE; ATAXIA; RECOVERY.

BY JOHN HOSACK FRASER, M.B. EDIN.,
LATE RESIDENT PHYSICIAN TO THE EDINBURGH ROYAL INFIRMARY.

THE following is the history of a most interesting case, which has recently come under my care, and which appears to me to be worthy of publication.

About two years ago M. W——, aged forty-five, was engaged at work when a brick fell on his head, from a height of twelve feet, inflicting a fracture of the posterior superior portion of the right parietal bone. In the course of three weeks he had so far recovered from the effects of that accident as to be able to resume work. For the next fifteen months the only symptom from which he suffered to indicate disease of the brain was occipital headache. About seven months ago he became depressed, taciturn, and apathetic, and complained of giddiness, amblyopia, diplopia, deafness, and loss of memory, from which it was manifest that he was the subject of a grave form of brain disease. A few months later his gait became unsteady and tottering, and his hair was becoming rapidly grey. When he walked he had an inclination to fall forwards or backwards; at other times he moved in a peculiar spiral manner, describing the so-called "circus" movements. About the end of March this ataxia became so much worse that he was unable to sit or stand. Urgent vomiting, a slow and irregular pulse, and drowsiness, accompanied with sleeplessness and delirium, set in. This was his condition when I saw him on March 29th, 1883, and, after making a careful examination on that occasion, I pronounced him to be suffering from a tumour of the cerebellum. Ophthalmoscopic examination revealed double optic neuro-retinitis. The right pupil was dilated and semilunar in shape; the left was normal both in size and form. His sensations, sensibility, and reflexes were perfectly normal, and there was an entire absence of motor paralysis.

My reasons for localising the disease to the cerebellum were as follows:—(1) The persistent occipital headache. This probably pointed to a stretching of the tentorium. (2) Vertigo. (3) Loss of coördination. (4) Amblyopia and diplopia. (5) Deafness. (6) Vomiting, and slowness and irregularity of the pulse. These two last-named symptoms probably pointed to an irritation of the pneumogastric nerve. The slowness and irregularity of the pulse varied distinctly with the headache, being most marked when the headache was most intense, and *vice versâ*.

As to treatment, before adopting any remedial measures, it was most important to decide the question of syphilis. He denied having had that disease, but, on making an examination, I found a cicatrix on the glans penis and enlargement of the glands in both groins. I ordered him one-sixteenth of a grain of the perchloride of mercury and ten grains of the iodide of potassium three times a day, and at the end of a week I was surprised to find the great improvement that was apparent in his condition. The vomiting, drowsiness, headache, and delirium had left him; his memory was decidedly improved; and his hair, which was previously grey, was fast returning to its natural brown colour. There was, however, no improvement in his coördination. Four days later I found him comfortably seated in his chair, and he could stand with his feet widely apart, but could not walk without tottering and falling. A week later I was much pleased to find that he could stand steadily with closed eyes when both feet were brought closely together, and walk remarkably well.

Birmingham.

THE TREATMENT OF DIABETES INSIPIDUS BY ERGOT.

BY T. HAMMOND WILLIAMS, L.R.C.P. ED., &c.,
SENIOR ASSISTANT MEDICAL OFFICER TO THE TOWN'S HOSPITAL AND ASYLUM, GLASGOW.

THE following notes may be interesting as corroborating recent research in the treatment of this previously intractable disease.

During a short period as resident assistant in the Glasgow Royal Infirmary, I had the opportunity of seeing several cases treated with valerian, and with very discouraging results (Trousseau). Galvanism was equally ineffective. Keeping in mind that there must be increased blood-supply to the kidney, and as this is controlled by the inhibitory branches of the sympathetic, the treatment is obviously one of decreasing the blood-supply through that channel. Of the many agents which act thus, ergot in its various forms seems the most potent. Two cases having come under my observation, the feasibility of the above treatment was suggested.

Margaret Mc——, aged fifty-one, widow, washerwoman, was admitted Oct. 21st. 1881. Her trouble commenced about four years ago. She had enjoyed fair health previously, except an attack of small-pox in her youth. Has had seven children. Was rather intemperate in her habits. The first symptom was thirst, of which she took little notice, until the frequent calls to pass urine compelled her to seek advice. When admitted her urine amounted to 280 ounces daily; sp. gr. 1002, clear, limpid; deposit of phosphates; no albumen; no sugar. Her appearance was pale and emaciated. Heart's action weak and fluttering. Complained of shifting pains, which gave her great annoyance. Skin was extremely parched, and spirits much depressed. Appetite voracious. Bowels regular. Two drachms of the fluid extract of ergot were administered thrice daily, combined with digitalis to steady the heart's action. Under this treatment the improvement was marked and striking, the quantity of urine excreted diminishing in three weeks to 140 ounces. This treatment was continued for another month, with the result of further reducing the quantity to eighty ounces; sp. gr. 1015. The pains disappeared after being only a fortnight under treatment. When the patient felt herself so much improved she left the hospital, notwithstanding my efforts to induce her to remain, promising to return if the symptoms were renewed. I have not since seen her.

Mary ——, aged forty-nine, widow, hawker. As in the above case, the first symptom which attracted attention was increasing thirst, afterwards frequent nightly calls to pass urine, of about four months' duration. When seen her bodily condition was good, appetite fair. Had history of "weak turns" of long standing, and repeated attacks of bronchitis. Heart sounds weak and distant, pulse soft and compressible. Shifting neuralgic pains, with vertigo, were much complained of, which no treatment seemed to benefit. Temperature normal; family history good. Urine: sp. gr. 1005; acid reaction, no albumen, no sugar, a trace of phosphates. Daily quantity of urine passed was 300 ounces. After failures with tannic, benzoic, and phosphoric acids, I again prescribed ergot, also in combination with digitalis, reducing the quantity of urine in twelve weeks to seventy ounces; sp. gr. 1018.

Although the dose of ergot prescribed was large, no ill effects were produced, except constipation, to counteract which an occasional purgative was given. The disappearance of the neuralgic pains during the progress of treatment seems to confirm the general idea of the nervous origin of the malady. The disease in the above cases was not traceable to any assignable cause or hereditary taint.

Glasgow.

VACCINATION GRANT.—Dr. Hartley, the union medical officer for Pemberton, has received the Government grant for efficient vaccination.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Prooemium.

ST. THOMAS'S HOSPITAL.

INTESTINAL OBSTRUCTION COMING ON FOUR YEARS AFTER THE OPERATION OF OVARIOTOMY; ABDOMINAL SECTION AND FORMATION OF ARTIFICIAL ANUS BY ATTACHMENT OF LOWER END OF ILEUM TO WOUND; RELIEF; DEATH FROM EXHAUSTION TWENTY-TWO DAYS AFTERWARDS.

(Under the care of Mr. SYDNEY JONES.)

FOR the report of the following notes we are indebted to Mr. W. H. Battle, surgical registrar.

E. J——, aged forty-three, married, was admitted on June 21st, 1882. In 1878 Mr. Knowsley Thornton removed tumours of both ovaries of papillomatous character, and also a small solid growth from the broad ligament; a similar one was left behind in Douglas's pouch. The woman made a good recovery, but she continued to have trouble with the bowels. For the first two years the constipation was almost constant, amounting once or twice almost to actual obstruction, relieved by the administration of atropine and morphia; but for seven months before admission there had been almost incessant diarrhœa, and the woman had not passed a single formed motion during that time. She had lost flesh considerably. For the last five weeks she had been troubled with frequent attacks of severe cramping pain in the abdomen, attended with marked movements of the intestines. During this time she was able to take very little food at all. About three weeks before admission she had for two days a violent attack of retching and vomiting, and at that time passed a great deal of blood-stained mucus from the bowel. On June 19th she had a more severe attack of pain than usual, and from that evening at six o'clock until admission there had been no action of the bowels, and the pain had increased. At twelve o'clock on the 21st she had a very violent attack of pain attended with vomiting, the ejected matter being brown and very offensive.

When admitted the patient was emaciated and pale, with an anxious look, and complained of the pain in her abdomen and of sickness. The abdomen was much distended, and the outline of some intestinal coils was clearly marked and large. There was the line of cicatrix remaining from the previous operation, but it was quite healthy. On examination per rectum a tumour could be felt behind the uterus, filling up Douglas's pouch. The vomiting had temporarily ceased; the tongue was moist, and her temperature was 98·6°. She was accordingly ordered a pill containing half a grain of powdered opium and one-third of a grain of the extract of belladonna to be taken every three hours, milk in small quantities and ice only being allowed, and an application of belladonna and glycerine placed over the abdomen. She was twice sick during the night; the vomit was not offensive, though brown. The patient did not sleep, but was fairly free from pain, though at intervals she had sharp bearing-down pains. Next morning (June 22nd) the tongue was rather furred, but moist. She was given a pill containing one-fourth of the extract of belladonna every three hours.

June 23rd: The abdomen was less tense. She had had no sickness since the 21st. Had passed much flatus by the bowel, but no solid fæces. She had no pain. On the 27th the patient was much better; had lost the anxious look, and was in good spirits; bowels acting pretty freely. At her own request she was allowed chicken, which she ate next day (28th) at dinner time. In the evening she was seized with severe pain in the abdomen, which she referred to the region of the umbilicus. The abdomen was distended and tympanitic, and she became considerably collapsed, frequently vomiting offensive fluid, though the odour was not fæcal. The face looked pinched and livid, whilst her pulse became rapid and weak; and it was evident that operation was advisable now if anything was to be attempted. Accordingly, at 10.30 P.M., with antiseptic precautions, Mr. Sydney Jones made an incision in the median line, about four inches in length, between the umbilicus and pubes. The peritoneum having been divided on a director, the finger was introduced, and a considerable quantity of sero-sanguineous fluid escaped. A largely distended coil of intestine appeared. No band was discovered, though there was much scattered deposit over the peritoneum. The incision was enlarged upwards, and a band was found passing from near the umbilicus towards the left iliac fossa. This, however, did not appear to constrict any definite portion. By this time a large amount of intestine was exposed, a good deal being out of the wound, and greatly hampering further search from its distended condition. It was, therefore, tapped, and a large amount of pale-coloured thin fluid drawn off. The intestine having collapsed to some extent permitted a further search to be made, and it was found that there was great matting of the ileum in the neighbourhood of the cæcum, binding it down, and, doubtless, causing the obstruction; it was quite impossible to free this. It was also found that the band before mentioned compressed the ileum above sufficiently to prevent fæces passing through. This was therefore divided between a double ligature; it was very thick, but was quite imperforate. The intestine had been tapped a short distance above the obstruction. The part which had been tapped was retained outside, the opening enlarged and stitched to the abdominal wall so as to form an artificial anus in the median line. The carbolic spray was used throughout, but the usual full dressing was not employed; the wound was dressed with lint soaked in carbolic oil, and a pad of salicylic wool placed over the opening. The patient suffered much from shock. A brandy enema and a subcutaneous injection of ammonia were given towards the end of the time.—29th: After the operation patient was sick four times between 1 A.M. and 5 A.M.; but she rallied rapidly and took nourishment in the form of Brand's essence and brandy-and-soda in small quantities all through the night. She had six minims of morphia subcutaneously, but had very little pain at all. At 5 A.M. her temperature was 99·2°. At this time the fæcal matter came away from the artificial anus for the first time. At 4 P.M. she was quite comfortable, taking her nourishment well. Fæcal matter was coming away freely. Temperature 99·8°; pulse 95; tongue fairly moist. Eight ounces of urine drawn off at 10 A.M. She perspired a great deal, and was somewhat drowsy, but much relieved. The temperature rose to 100·8° during the night, and the patient was restless and in much pain; but she slept at intervals, though never for long. On the following morning she was evidently weaker. Pulse feeble and respiration shallow and with some difficulty. Tongue red, dry, and sore; bowels were much relaxed in the night; perspiring freely. She became quiet and composed after the administration of five minims of morphia subcutaneously. Nutrient enemata were commenced and continued every four hours. They were composed of three ounces of beef-tea, the yelk of an egg, half a drachm of brandy, ten grains of pepsin, and three grains of pancreatin.

On July 1st the patient passed a comfortable night after injection of morphia; was stronger and breathing was easier. Complained chiefly of soreness of her tongue; ordered borax and honey. On the 2nd, as the nutrient enemata were returned, they were discontinued. Tongue clean, of raw ham appearance and fissured; soreness relieved by application. Free from pain, only complained of occasional faintness. No distension of the abdomen, though a good deal of tenderness. The wound looked well, and there was free discharge from the opening. Urine drawn off by catheter since the operation. Pulse 120, of fair strength. Is taking champagne, brandy, and beef-jelly. In the evening she became worse and frequently vomited, and only slept about an hour during the night; she was ordered half a grain of opium pill three times a day.—On the following morning a mixture containing carbonate of bismuth and dilute hydrocyanic acid was given three times a day; and as everything given by the mouth was rejected, the nutrient enemata were again tried, but were only retained about an hour and a half. There was less fæcal discharge from the artificial anus, and the patient was decidedly weaker, and the temperature subnormal, 97·6°. There was no sickness after 10 P.M. Only a little iced brandy-and-water allowed by the mouth, and the enemata were continued. Temperature 99·2°. On the 6th she had a slight return of the sickness, and was allowed nothing more by the mouth; had slept fairly after injections

of morphia. Temperature 97·4°; was without pain. Wound redressed; stitches removed; union not good; parts supported by strapping. On the 10th the tongue was still furred and rather glazed; she had vomited again; there was a free discharge from the artificial anus, and the patient appeared fairly well. Temperature 98·8°; pulse 120, stronger. Enemata every three hours; these were retained fairly. On the 14th, though she had slept fairly well, she was weaker and unable to retain the nutrient enemata. A little claret by the mouth was tried, but it caused vomiting. Small quantities of fæcal matter passed from the wound. Pulse 120, weaker. Temperature 99·2°.—15th: Pulse 120; temperature 98°. Tongue dry and rather glazed. No vomiting. Slept in snatches, and her mind was not so clear as usual.—17th: Much weaker. Pulse 108, feeble. No pain. Nutrient enemata not retained longer than an hour. Temperature 96·2°.

On the 18th the had slept well, and was somewhat better, though the pulse was 120, and still feeble; had retained one enema, but only takes a little brandy and soda-water by the mouth. Temperature 96·4° to 98°.—19th: During the day there was increasing weakness, the evening temperature rose to 102·4°, and she died soon after midnight. Before the operation the temperature varied from 97·4° to 99·2°. The evening temperature after operation was 98·6°. Next day it reached 100·8°; but did not again exceed 99·6° until the evening of the 19th, when, as before mentioned, it was 102·4°. The morning temperature was usually subnormal, and on one occasion was only 96°.

A post-mortem examination was made a few hours after death. There were a few adhesions at the apex of the right lung; thoracic organs otherwise healthy; the kidneys and spleen normal; the liver small, friable, and adherent to the under surface of the diaphragm; gall-bladder much distended. The coils of intestine were slightly glued together; there was recent peritonitis. The artificial anus had been established in the small intestine twenty-nine inches from the ileo-cæcal valve; the gut above was quite patent and filled with bilious fluid fæces as far as the orifice made. The lower part of the ileum and the cæcum were matted together by glandular and inflammatory infiltration. The rectum was compressed and adherent to the posterior wall of the uterus and upper part of the vagina. On separating them a small abscess cavity containing about four ounces of pus was found. In Douglas's pouch were three or four papillary growths about the size of filberts. They were hard, nodular, and seemed to spring from the region of the left ovary and broad ligament. The position of the left ovary was occupied by a firm mass of fibrous cicatricial tissue from which grew one of the papillary growths.

CARDIFF INFIRMARY.

VERTICAL DISLOCATION OF PATELLA.

(Under the care of Dr. VACHELL.)

FOR the following notes we are indebted to Mr. P. Rhys Griffiths, M.B., B.S. Lond., house-surgeon:—

Michael E——, aged thirty-one, a labourer of strong build, was admitted into the infirmary on the night of Feb. 13th, 1883. He said that when assisting some men to push a trolley his legs were jammed between the trolley and a long iron bar called "The David." The pain he experienced was intense—he described it as "wrenching." After the accident he was unable to move.

On examination the left leg was found to be fully and forcibly extended, and the dislocation of the patella was evident. The patella had been rotated on its vertical axis, the convex anterior surface was directed forwards, inwards, and slightly upwards. The outer slightly concave half of the posterior surface of the patella was plainly seen and easily felt, the skin being very tense. The right border of the patella rested apparently in the small depression immediately above the inter-condylar groove. To the inner side of this border immediately there was a well-marked depression, in which the ridge to the inner side of the articular surface of the internal condyle of the femur, as well as a part of the smooth condylar surface, could be felt; a portion of the external condylar surface was also felt. The tendon of the quadriceps extensor was very tense, and could be plainly seen as two strong bands. The patella was slightly movable on the right border as axis. Attempted flexion of the limb was accompanied by acute pain. The patient complained of pain only over the inner side of the knee-joint.

The patient was put under the influence of ether, and as soon as the quadriceps muscle relaxed, with a very little lateral pressure on the margins of the bone the dislocation was easily reduced by Dr. Vachell.

Remarks.—This is about the twentieth case which has been placed on record. As a rule, these dislocations are caused by muscular spasm; in this case there can be no doubt that it was caused by the pressure of the iron bar directly upon the patella itself, the spasm of the quadriceps retaining it in its abnormal position. The reduction, which in many cases has been most difficult, was in this very easily effected. After the reduction a back splint was put on, and this on the following morning was replaced by a plaster case.

EYE INFIRMARY, GLASGOW.

REMOVAL OF EYELASH FROM ANTERIOR CHAMBER FOUR WEEKS AFTER INJURY, RESULTING IN GOOD VISION.

(Under the care of Dr. CRAWFORD RENTON.)

J. D——, aged thirty, gamekeeper, was admitted on Oct. 18th, 1881. He was suffering from an injury to his right eye, caused by the splintering of a percussion-cap two weeks previously. On examination, a slight abrasion of the cornea was observed; the iris was irregular, and across the lower and inner side of the pupil a minute foreign body seemed to be lying, but owing to the presence of iritis, it was difficult to be certain that it was not pigment or lymph. Fomentations and atropine solutions were recommended to soothe the pain and subdue the iritis. On Oct. 28th the eye was quiet, the pupil had yielded, and it was now more apparent that a foreign body was present, and that it was either a very fine splinter of the cap, or, as the resident surgeon, Dr. Hunter, suggested, an eyelash.

On Nov. 2nd Dr. Renton made an incision through the lower and outer aspect of the cornea, and removed with a fine pair of forceps the foreign body, which proved to be an eyelash.—18th: Pupil did not yield freely after the operation, but it gradually improved, and the patient was dismissed with good vision.

Jan. 6th, 1883.—The patient is reported as having found his eye as useful as formerly during the whole shooting season, and no trace is left of the inflammatory attack or ill effects from the injury.

ABERDEEN GENERAL DISPENSARY.

EXTERNAL HÆMORRHOIDS IN A NEW-BORN CHILD.

(Under the care of Dr. FRANCIS OGSTON, junior, and Mr. GEORGE VINCENT.)

AT the beginning of February a child three days old was taken to the dispensary by its mother, who stated that she had noticed the child cried very much when its bowels were moved, and that it had a red projecting tumour at the anus.

On examination a bright-scarlet tongue-shaped tumour was seen to spring from the point of union of the mucous membrane of the anus with the skin. It was situated at the left side. At the front part of the anal border a second flatter tumour of the size of a split pea was also found. After a few days' treatment with boracic acid ointment the inflammatory redness had in a great measure subsided, and the larger tongue-like tumour had now changed into a club-shaped unmistakable hæmorrhoid with a narrow pedicle; and the second flatter projection had greatly diminished. A day or two afterwards the larger tumour was removed by surrounding the pedicle with a loop of thread.

Note by Dr. OGSTON.—The earliest case of hæmorrhoids which I can find record of occurred in a child of four months of age, but this seems to have been existent at birth or a few hours after it. It is difficult to account for such a phenomenon thus early in life, for the bowels had all along been moved freely and the stools were of normal colour and consistence, a fact which was verified by the bowels being moved while I was examining the child. The icterus neonatorum had never been present. The liver seemed on palpation of normal size; and the umbilicus cicatrised in a healthy manner. Thus none of the usually given predisposing causes of hæmorrhoids—portal congestion, liver disease, and overloading the rectum with hard fæces,—were present. The labour, the sixth, had been a perfectly normal one, with head presentation.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Gliomatous Enlargement of the Pons Varolii.—Case of Asymmetry of the Brain, presenting peculiarities which bear upon the Question of the Connexion between the Optic Nerves and certain Definite Areæ of the Cerebral Cortex.

THE ordinary meeting of this Society was held on the 8th instant, Professor J. Marshall, President, in the chair. Two papers were read dealing with cerebral pathology—one by Dr. Money upon a remarkable symmetrical affection of the pons; the other by Dr. Sharkey, in which corroborative evidence in support of the connexion between the angular gyrus and the visual function was afforded.

Dr. BARLOW showed an infant with Congenital Absence of both Clavicles.

The following is an abstract of the paper on Gliomatous Enlargement of the Pons Varolii, by Dr. ANGEL MONEY. The object of the paper was to draw attention to the existence of a remarkable enlargement of the pons Varolii of undoubtedly infrequent occurrence. The disease was remarkable from the enormous increase in size of almost every part of the pons and neighbouring parts of the brain; the tendency to implication of one-half of the pons as much as the other is a noteworthy feature. The cases recorded are entitled to further consideration from the light they throw on a condition which in this country has been ill understood. Cases of so-called gelatiniform enlargement of the pons Varolii, published in the St. Bartholomew's Hospital Reports, by Dr. Gee and Dr. Percy Kidd, are unquestionably of the nature of gliomata, and it would seem therefore advisable that the descriptive provisional nomenclature should be abandoned. Virchow, in 1863 ("Die Krankhaften Geschwülste"), described the various kinds of gliomata (including the infiltrating forms which give rise to diffuse enlargement) as occurring in any part of the brain, and there seems to be no good reason for the employment of a special name for the disease when it happens to occur in the pons. The first instance here recorded was worthy of remark from the fact that although the disease involved both halves of the pons the symptoms were decidedly unilateral. This kind of thing has been mentioned in other recorded cases. In the second case hæmorrhages into the retina and intestinal mucous membranes were discovered. Though this association may be one of mere coincidence or unreal relationship, yet, looking to the known occurrence of hæmorrhages in various parts of the body, almost undoubtedly as the result of lesions, more especially of the base of the brain, it would seem not unlikely that here also we have to do with a causal connexion. The absence of such hard-featured symptoms as hyperpyrexia and glycosuria is worthy of mention, and a partial explanation may possibly be forthcoming in the notion that for the production of such symptoms lesions of sudden onset are required.—The PRESIDENT pointed out the difference between the limited and localised nature of the disease in this instance as compared with glioma of the eyeball, with its great tendency to recur and spread into the brain. He asked whether there was any family history of sarcoma in Dr. Money's cases.—Dr. GEE did not think the symptoms differed from those produced by other diseases of the pons—e.g., tubercular tumours, and he had no doubt that Dr. Money had drawn correct inferences from the microscopical characters of the lesions in referring them to a known category of disease.—Dr. SOUTHEY asked whether there was any evidence in support of a view formerly held that these gliomatous infiltrations were due to syphilis.—The PRESIDENT asked Dr. Ferrier if he had inferred anything from the statement that no medullated nerve fibres were found in the diseased part, and how this tallied with the fact that paralysis was not complete.—Dr. FERRIER said that the fact that there was not total paralysis proved that nerve fibres must have been present, although they might have escaped observation. He had lately under his care a case in which he had diagnosed syphilitic lesion of the upper part of the ascending frontal convolution, and after death an abundant small-celled infiltration was found in this region, in which nerve fibres and cells could only be detected with difficulty. The symmetrical disposition of the lesion and its limitation to the pons were remarkable points in the cases described by Dr. Money. The symptoms were those of disease of the pons; but it would not be possible to diagnose the nature of the lesion. In recording these cases Dr. Money had done great service to pathology.—Dr. KIDD said that when he examined Dr. Gee's case he was not aware that Virchow had spoken of a gliomatous infiltration, but had regarded glioma as a definite form of tumour, nor did microscopical examination show the definite neuroglic structure characteristic of such tumours, but only a small-celled infiltration. There was, then, a difference between this form of disease and glioma proper, although they are probably related. In the case he examined he found numerous axis cylinders, although medullated fibres were not visible.—Dr. HALE WHITE suggested that the non-malignancy of gliomata was probably due to the fact that, unlike sarcomata, they are developed from tissue that is already highly differentiated—i.e., the neuroglia. He had never seen or heard of glioma giving rise to secondary growths. The superficial resemblance which the diseased pons bore to the normal structure was doubtless due to the fact that the lesion was essentially an overgrowth of the neuroglia between the strands of nerve fibres, so that the bands of new tissue would follow the lines of the latter.—Dr. MONEY, in reply, said there was no family history of sarcoma, but in each case one other child had died from brain disease. It was generally held now that gliomata have nothing to do with syphilis. Although he had said that no medullated fibres could be found in the most diseased parts, he was far from thinking that axis cylinders were absent; indeed, several of the "nuclei" were probably sections of axis cylinders; and in other parts of the pons unaltered ganglion cells were to be seen. "Glioma" was a generic term, and the amount of intercellular substance varied in different forms, of which some were extremely cellular, and might be regarded as sarcomata of the brain. The most important point was, that the general pattern of the brain-tissue was preserved in these cases. It was not a true hypertrophy of the neuroglia, but a perverted hypertrophy, in which there was a large production of small cells, with no true neuroglic tissue.

Dr. SEYMOUR J. SHARKEY read a paper on a case of Asymmetry of the Brain presenting peculiarities which bear upon the question of the Connexion between the Optic Nerves and certain definite Areæ of the Cerebral Cortex. The patient, whose age was twenty-five, died in St. Thomas's Hospital, owing to injuries received from the fall of a house. Her right arm and leg were somewhat smaller than their fellows, and the former was rigid. After her death this condition was ascertained to have been congenital, but no observations were made during life, either with regard to this malformation, or with reference to the condition of her special senses, &c. The subject of this communication was primarily the anatomical peculiarities of the brain, and secondarily the physiological conclusions which they suggest. The most striking characteristics of the specimen were:—1. The general slight arrest of development of the left hemisphere. 2. The small size of the corresponding crus cerebri and anterior pyramid. 3. The absence of the angular gyrus and superior temporo-sphenoidal convolution, together with the fusion of some of the other convolutions of the left temporo-sphenoidal lobe. 4. The extreme atrophy of the optic tract, optic thalamus, and corpora geniculata on the same side. It was argued that the knowledge we possess at present of the connexion between the central convolutions of the brain and the motor strands justifies us in referring the small and somewhat rigid limbs on the right side, together with the atrophy of the left anterior pyramid and crus cerebri, to the condition of the two ascending central convolutions, and their expansions near the great longitudinal fissure. The atrophy of the left optic tract, optic thalamus, and corpora geniculata must be looked at in connexion with the absence of the angular convolution, and with the malformation of the left temporo-sphenoidal lobe. Although, from a consideration of this single anatomical specimen, we are hardly justified in making any more precise assertion, still we can hardly avoid looking upon it as confirmative of the physiological experiments of Ferrier, which point in the same direction, and which seem to indicate that the angular gyrus is in some way bound up with the function of vision. The specimen likewise supports the views that the optic thalamus has some direct connexion with sight, and that there is semi and not total decussation of the optic nerves in the chiasma. For

the right optic nerve bears a far larger proportion to the left than the left optic tract does to the right. And, finally, the absence of any inequality between the corpora quadrigemina of the two sides supports the theory that these bodies are not in the direct line of fire, so to say, between the retina and the cerebral cortex; though they may be in some way related to the coördination of the ocular muscles, which is necessary for normal vision. — Dr. FERRIER had been much interested in the paper, which detailed carefully and clearly a very important case. He had seen the specimen, and could confirm the fact of the limitation of the atrophy to the angular gyrus and superior temporo-sphenoidal convolution. Unfortunately, as often happens, no clinical history was available. The atrophy of the pyramid complicated the case, but it was, as Dr. Sharkey had stated, doubtless due to the general arrest of development of the left hemisphere. Was there actual sclerosis established? The chief point of the case concerned the angular gyrus, destruction of which he had shown to be followed by temporary blindness. In the experiments described by himself and Dr. Gerald Yeo at Cambridge, three years ago, it was shown that the visual centre comprised not only the angular gyrus, but the occipital lobe also, the former being the more important. Dr. Sharkey's case confirmed this. The case was also of value because the lesion was primarily cerebral, whereas in most recorded cases one has to do with the secondary effect on the brain of the loss of an eye or of a limb. In this respect the fact that the corpora quadrigemina were intact was valuable as throwing light on their function. The case at first sight might not seem to confirm the fact arrived at from experiment, that the temporo-sphenoidal lobe has to do with audition; for there was no atrophy of the auditory nerve like that of the optic tract. Perhaps the connexion of the auditory nerve with its nucleus accounted for its immunity. The optic thalamus was probably related to all sensory functions and not specially to vision.—Dr. MONEY asked if there was any change in colour in the wasted convolutions. He had recently examined a case where there was pigmentation of the atrophied gyri, probably due to hæmatoidin.—The PRESIDENT asked whether there was any corresponding cranial asymmetry, whether any difference at all was observed in the relative sizes of the eyes, and any changes in the spinal cord. He also asked as to the relative thickness of the affected parts of the cortex, and observed that it is not probable that the cortical "centres" are strictly defined and limited, but that neighbouring parts of the grey matter may share to a slight extent in the functions of these "centres." The fact that the corpora geniculata wasted suggested that these structures are related to the nutrition of the optic tracts, and are not directly concerned in vision proper.—Dr. SHARKEY, in reply, said that he could detect no difference in the two sides of the cranium; and none of those who had seen the patient had observed any difference in the eyeballs during life. In the spinal cord there was very definite descending sclerosis, most abundant in the upper cervical region in the posterior part of the lateral column, but there was no change in the tract of direct fibres in the anterior column. He had not yet examined the affected cortex minutely for fear of disturbing the relation of the parts, but had observed no change in its colour. The case was admitted into the surgical wards for an injury to the back, and paraplegia was sought for. The condition of the leg was noted, but the upper limb was not observed, nor was any special examination made of the eyes. He had now collected five cases of limited cortical lesions associated with local paralysis, and all of them were confirmatory of Ferrier's experimental conclusions. At the same time recovery of a limb from paralysis due to cortex lesion pointed to the probability that one part of the brain may take on the function of an injured part after a time.

MEDICAL SOCIETY OF LONDON.

Spinal Deformity, with Fragility of Bones.—Foreign Body in the Pterygoid Region.—Pyæmia in a Child associated with Cystitis and Pyelo-nephritis.

A MEETING of the above Society was held on April 23rd, Sir Joseph Fayrer, President, in the chair.

Mr. PEARCE GOULD showed a case of Ununited Fracture of the Olecranon on which he had performed antiseptic suture of the fragments.

Dr. LEE read a paper on a case of Spinal Deformity and Fragility of Bone in its relation to Insanity (patient shown). He remarked that the diseases of bones which caused deformities were obscure in their origin and difficult to explain. The pathological changes alone did not assist us in understanding them, and it was rather by observing the subtle influences of the hereditary peculiarities and close study of the clinical history of cases that we might arrive at such a knowledge of the causes as to enable us to treat the diseases with advantage. The man was thirty-nine years old, and had lost in seven years nearly five inches and a half in height from curvature of the spine, tibia, and other bones. He had broken both humeri at different times, as well as the clavicles and the patellæ. There was a strong family history of insanity and dipsomania. This man had not taken stimulants for twenty-five years. The exact nature of the case was doubtful, as there was some thickening of the bones and other symptoms of osteitis deformans; at the same time there were some of the ordinary symptoms of malacosteon. Could the two conditions co-exist?—Dr. SYMES THOMPSON asked if there was anything like the gastric crises seen in locomotor ataxy. The case was unlike the ordinary cases of fragility of bone in progressive muscular atrophy, Charcot's disease, osteitis or mollities ossium.—Mr. HUGH SMITH asked if the urine contained an excess of phosphates.—Sir J. FAYRER asked if Dr. Lee had inquired into the statistics of lunatic asylums as to fragility of bones. The disease was not inflammatory. Had any other members of the family suffered in the same way? He mentioned a case where a tibia became bent from chronic osteitis, following an abscess which had been cured by trephining.—Dr. LEE, in reply, said there was no gastric crises nor marked excess of phosphates. Its resemblance to rickets had attracted his notice. In cases of rapid bending of bones after fever, the bones recover quickly, and these cases differ from the common form of rickets. Rickets was associated with nervous depression. Fragility occurs in paralysis of the insane, and osteomalacia had been seen in melancholia. In the present case no other members of the family were affected.

Mr. HUGH SMITH related a case of Foreign Body in the Pterygoid Region. In March last a boy, aged six years, was brought to Mr. Henry Smith, having fallen with a piece of clay pipe stem between his teeth. On rising from the ground blood flowed freely from the mouth, and a small opening was visible internal to the second lower molar on the right side. On passing a probe a rough surface was felt at the depth of half an inch. Chloroform was given a week later, but owing to the rigidity of the jaws an attempt to remove the foreign body failed. Five weeks later chloroform was again given, the mouth being kept open with Rose's gag; the sinus leading to the rough surface was enlarged by incision, and a piece of pipe-stem one inch long was removed with the nasal polypus forceps. Mr. Smith also detailed a similar case which came under the care of his father, Mr. Henry Smith, twenty years ago. A man while smoking received a violent blow in the face. Five or six months afterwards he suffered from a painful swelling behind the angle of the jaw proceeding from an abscess, and eventually from its sac was taken a piece of pipe-stem an inch long. In both of these cases the foreign body entered the soft tissues internal to the ascending ramus of the jaw.—Sir J. FAYRER mentioned the case of an officer at Darjeeling, who fell on the stump of a bamboo and was impaled. He remained there for many hours; the bowel was injured and also the bladder. He was sent to Calcutta, and after great suffering a stone was eventually found in the bladder around a fragment of bamboo.—Dr. ISAMBARD OWEN referred to a specimen in the museum of St. George's Hospital of a hat-peg broken off through the stem. It had been lodged in the orbit, and was extracted, the patient recovering.—Mr. ALBAN DORAN said there was often no suppuration around steel instruments—e.g., a prong of a fork.—Mr. PEARCE GOULD referred to the fact that many foreign bodies remain in the tissues without setting up suppuration, which appeared in many cases to be due to septic particles carried by them into the wound.—Sir J. FAYRER added that foreign bodies caused mischief by the great tearing and bruising of the tissues. He had known bullets to remain encysted in the body for many years without injury.—Dr. DAY mentioned a case where a fish-bone in the rectum caused long-continued and profuse hæmorrhage, which ceased on the detection and removal of the foreign body.—Mr. BLACK knew of a case of intractable rectal abscess, where, at the end of a year, a piece of trouser was extracted, which had been carried in by impalement some years before.

Dr. DAY read notes of a fatal case of supposed Pyæmia in a Female Child, associated with extensive changes in both Kidneys and Bladder. The child was twelve years and a half old, and came under care on Feb. 10th, 1883, suffering from constant sickness and failing strength. Five years previously she was said to have had measles and scarlet fever. Two days after admission a large and prominent tumour was detected in the abdomen, extending from the umbilicus to the pubes. This proved to be the bladder; a catheter was passed with difficulty, owing to contraction of the urethral orifice, and twenty-six ounces of acid urine containing a little pus were drawn off. A petechial rash appeared, and became general. On the 23rd she became delirious, and on the 25th she died. After death the right kidney weighed three ounces. Its capsule was thickened and universally adherent; the pelvis was dilated, containing four ounces of turbid urine. The left kidney weighed about five ounces, its surface covered with points of suppuration and small abscesses; the ureter dilated and its walls thickened. The bladder had thickened walls and greatly congested lining membrane. Dr. Day remarked that retention of urine is rare in children, especially in girls. The cause in this case was obscure. The contracted urethra might account for the bladder condition; and he thought the fatal illness was of pyæmic nature.—Dr. AMAND ROUTH thought the cystitis preceded the contracted condition of the urethra.—Mr. PEARCE GOULD thought the case to be one of surgical kidney caused by stricture of the urethra.—Dr. ROUTH agreed with Mr. Gould. He asked whether the child had syphilis. A stricture might often occur from a cicatrising chancre; or was there any history of masturbation?—Dr. EWART suggested that there was local tuberculosis of the urinary tract. If it was pyæmia, it was local and not general, and death resulted from uræmia.—Dr. DAY said there was no evidence of vulvitis or of masturbation, nor of syphilis. The symptoms were not those of uræmia. There was no tuberculosis.

MIDLAND MEDICAL SOCIETY.

THE ordinary meeting of the above Society was held on April 4th, in the Medical Institute, Birmingham, Dr. Malins, President, in the chair.

Dr. MALINS exhibited, with miscroscopical sections, two Atrophied Ovaries removed from a patient, aged forty. There had been no menstruation for six years, and great pain completely incapacitated the woman. Convalescence had been quite satisfactory.

Dr. SUCKLING showed a case of Paraplegia in a woman, aged twenty-five, which he considered to be hysterical. Owing to an attack of subacute rheumatism, a sudden rise of temperature occurred, attended with complete spastic paraplegia; but in twenty-four hours the rigidity passed off, and the patient was able to move about. There was ankle clonus and an increase of patellar reflexes on both sides, also analgesia. Electrical sensibility had been found to vary considerably, the responses being normal.

Mr. HUGH THOMAS exhibited two very long Nails removed from the great toes of a woman, aged sixty-five. They had been allowed to remain uncut for eleven years. The right one measured five inches and a quarter, and passed under the four other toes. The left was three inches and three-quarters long, and lay over the other toes of the foot. The patient was unable to walk. After removal, the matrices on both sides were found to be healthy.—Mr. Thomas also showed a Placenta from a case of single birth, having a separate cotyledon imbedded in its membranes; attached to it was a rudimentary cord inserted into the maternal end of the umbilical cord, suggesting the former existence of another fœtus. During the whole period of pregnancy there was persistent vomiting. No post-partum hæmorrhage took place.

Mr. CHAVASSE showed a child, seven years of age, upon whom he had performed Paracentesis Thoracis for Empyema by means of a double opening in the eighth intercostal space. The child was lost sight of, but returned in four months with the drainage-tube *in situ* and the lung collapsed. In a fortnight after removal of the tube the wounds were closed, and the normal physical signs fully re-established.

Dr. EDGAR UNDERHILL (Tipton) exhibited eight small Phosphatic Calculi removed from a child, eight years old. The bladder had been examined for stone several times, but nothing could be detected with the sound. As circumcision did not altogether relieve the symptoms, Dr. Underhill made an exploratory incision into the bladder, and the stones were then readily detected by the finger and removed.

In a paper on the Administration of Parochial Medical Relief, Dr. HICKINBOTHAM started by asserting that sickness was a most potent factor in producing and maintaining pauperism, and thus causing heavy rates. Therefore it was manifest that it would be an economical policy to use such means as would tend to prevent illness or shorten its duration. It was argued that to do this the best men, the best medicines, and the best appliances should be available in the Poor-law medical service. Three reasons were stated that deterred first-class men from accepting parish appointments: 1st, bad pay; 2nd, social disability; 3rd, harassing supervision. Dr. Hickinbotham considered that payment should be equal to that received by one of equal education and ability in the legal or other professions; that all medicines and appliances should be supplied at the cost of the parish; and that in large centres the appointments should be sufficiently valuable to demand the whole of the officer's time, as in the case of medical officers of health. Dr. Hickinbotham was not in favour of the permanent tenure of office, but thought that reasonable notice on either side should determine the appointment. It was thought that consultations should be held in obscure or difficult cases at the cost of the guardians. Referring to the management of workhouse infirmaries, an opinion was expressed that they would be best worked upon the hospital plan, with a senior and responsible non-resident and a junior resident staff of house-physicians and surgeons. Dr. Hickinbotham regretted the antagonism which often existed between boards of guardians and their medical officers, as also the attitude of the central authority, the Local Government Board, which, he said, was never marked by confidence or cordiality towards the medical profession.

The last ordinary meeting of the session was held in the Medical Institute, Birmingham, on April 18th, Dr. Malins, President, in the chair.

The PRESIDENT exhibited, with microscopic sections, an Hypertrophic Polypus of the Cervix Uteri; also an Ovarian Cyst showing the formation of daughter cysts. The tumour altogether weighed twenty-eight pounds.

Mr. JORDAN LLOYD exhibited a specimen of Necrosis of the Patella, the result of using a peg leg in a case where the os calcis was previously diseased.

Dr. EDGAR UNDERHILL (Tipton) exhibited a simple form of Ovariotomy Trocar, which consists of a plain tube tapering to a point, sufficiently sharp to puncture any cyst, but not sharp enough to injure any internal organ. The openings are at the sides, and there are no clips of any kind. He had demonstrated its utility in a case at the Guest Hospital, Dudley, where a multilocular ovarian cyst was removed weighing seventy-two pounds. The usual clips he had found troublesome, often tearing the cyst-wall and allowing the escape of fluid into the peritoneal cavity.

Mr. CHAVASSE showed a Tongue removed by scissors for epithelioma. The hæmorrhage during the operation was so profuse that it was found necessary to open the trachea and suck the blood out of the patient's windpipe.

Mr. HUGH THOMAS read the notes of a case of Uterine Hydatids accompanied by Icterus. The patient was an anæmic woman, aged twenty-six; the weight of the mass removed was three pounds and three-quarters; no post-partum hæmorrhage took place. With regard to the jaundice, the author thought it probable that a direct connexion existed between the two conditions, caused by some undue pressure of the morbid mass upon the biliary apparatus, as when the uterus had been emptied a rapid convalescence took place.

Mr. CHAVASSE in a paper on Neurectomy as a Method of Treating Facial Neuralgia discussed the plans of performing the various operations that had been devised. Many instances were quoted, occurring in his own practice and those of other surgeons, in which the operation had resulted in long periods of relief; and, again, cases in which the painful manifestations were only subdued for a short time. The weight of the evidence showed that in certain instances neurectomy held out hopes of long or permanent relief from suffering when other means had proved ineffectual.

DR. OLIVER WENDELL HOLMES has written to contradict the rumour that it was his intention to visit England during the present year.

Reviews and Notices of Books.

Lehrbuch der vergleichenden Anatomie der Wirbelthiere. Bearbeitet von Dr. ROBERT WIEDERSHEIM. Prof. in Freiburg. Part I., pp. 476. Jena: Gustav Fischer. 1882.

DR. WIEDERSHEIM states in his preface that the present work has been long in preparation, that he has endeavoured to give in it a good *résumé* of the present state of the knowledge we possess in comparative anatomy, and that he intends it to be used by and to be useful for the student, the zoologist, and the physician. There can be no doubt that the wide extent of the field of comparative anatomy permits few even of those who are most familiar with the subject to give a general account of the structure and morphological characters of the animal kingdom. In English, for example, we have only two works that can be considered as even approaching the modern standard of knowledge in Comparative Anatomy of Vertebrata, and embracing the information obtained by recent inquirers. One of them is Mr. Huxley's work and the other that of Mr. Mivart, though the subject is given in some detail in Gegenbaur. In Germany the great work of Bronn progresses slowly—so slowly, indeed, that a second edition of the first volume is already appearing, long before the last parts of any of the higher classes are complete. In France M. Lanessan has just commenced a work on zoology and comparative anatomy, which promises well and is profusely illustrated; but on the whole it seems right that a sound and yet comprehensive work on these subjects by a master should appear. The present volume fulfils the purposes for which it was intended by its author very well. It deals, as the title implies, with the Vertebrata alone.

The plan adopted by Professor Wiedersheim in this volume is that after a short general introduction he takes up successively the integument, the skeleton, the muscles, the electric organs, and the nervous system, in the several classes of vertebrate animals, commencing always with the fishes, and rising in the scale through amphibia, reptiles, birds, and mammals, which has the advantage of enabling the student not only to follow the organ described in its gradually increasing or varying degrees of complexity, but in addition to compare it with its embryological development.

A careful study of this work would be an extremely serviceable introduction to that of human anatomy, by giving that kind of general knowledge which would familiarise the young surgeon with the broad outlines of his future work. The book is sufficiently illustrated, and the author seems to be familiar with foreign as well as German work.

The Year-Book of Pharmacy for 1882. Edited by LOUIS SIEBOLD, F.I.C., F.C.S. London: J. and A. Churchill. 1882.

THE Year-Book of Pharmacy is of such value as a work of reference that it is with much pleasure we record the appearance of this volume. During the past twelve months considerable progress has been made in the investigation of the characters and composition of some of our most valued alkaloids. If the actual synthesis of many remains as yet unaccomplished, signs are not wanting that the day is not far distant when this problem will be solved. Ladenburgh's continued researches in connexion with the mydriatic alkaloids are of considerable importance. In addition to the artificial products known as tropeines he has succeeded in producing another series of analogous bases by the action of chlorohydrines on secondary amines, and these in turn yield other basic compounds resembling natural alkaloids in their composition and properties. The number of new alkaloids thus brought within the range of possibility appears to be unlimited, and opens up a wide field both for chemical and physiological research. Another subject of considerable interest, to which reference is made in this work, is the mutual relation of certain of the opium alkaloids. It will be remembered that not long ago it was announced that Grimaux had succeeded in effecting the conversion of morphia into codeia. Doubts were subsequently thrown on the identity of the codeia thus formed with the product obtained direct from opium. These doubts are now disposed of by the researches of Dott and Hesse, whose observations fully confirm Grimaux's statements. The results of an examination of several specimens of pilocarpine indicate that this substance, as met with in commerce, is not a simple alkaloid, but a mixture of two distinct bodies, differing in characters and in physiological action. The jarborine, which is usually regarded as the impurity, may be removed by treating the nitrate with absolute alcohol. Another substance which has recently received careful investigation is chinoline, and attention is called to the fact that many specimens are impure, consisting of a mixture of several homologous bodies. This is a matter of some practical importance, for considerable risk would attend the administration of a substance containing aniline and nitrobenzol. Plugge has investigated the relative activity of aconitines from different commercial sources, and finds that Petit's nitrate of aconitia is at least eight times as strong as Merck's, and a hundred and seventy times as strong as Friedlander's. The preparations known as German aconitine are by no means of uniform strength, some of them exhibiting differences greater even than those observed between the aconitines of Merck and Petit. This points to the necessity for greater care in prescribing aconitine, as the dispensing of a different preparation from that intended by the prescriber might lead to fatal results. Mr. Holmes points out that the description given in the British Pharmacopœia is inadequate for distinguishing the root of Aconitum napellus from other species, that the imported roots are collected by peasants having no knowledge of botany, and that they are sold without any guarantee as to the time of collection. In his opinion the only way to secure root of good and uniform quality is to limit the officinal drug to home-grown aconite flowering in May and June, and gathered while the plant is in flower.

In addition to an account of these interesting researches, the volume contains a number of abstracts, notes, and formulæ, together with several valuable papers read before the British Pharmaceutical Congress at Southampton in August last.

A Compend of Human Physiology. By ALBERT P. BRUBAKER, M.D., Demonstrator of Physiology in the Jefferson Medical College. pp. 133. London: Henry Kimpton. 1883.

THIS is a well-written little book, and if the plan recently adopted by the College of Surgeons, of compelling every student to pass an examination at the end of the first year of study, be ever fully carried out, such a work would prove useful as indicating the extent of information implied under the term elementary physiology, and that amount of knowledge which might be fairly expected from an intelligent student after attendance on one course of lectures, and with one year's reading. We have read through a great part of the book, and have noticed but few errors. In speaking of the effects of division of the third nerve, the author states that it produces persistent accommodation of the eye for long distances, which is correct as far as it goes, but might, we think, be better expressed by saying that its division produces loss of accommodation for near objects, the author's expression implying an active rather than a passive condition. Again, the statement that the blood in passing through the lungs loses two degrees of temperature is certainly open to question. Many good observers consider that the tempera-

ture in the left auricle is not materially lower than that in the right. On the whole, however, the facts that are given are the essential ones in each section, and would constitute a good foundation for subsequent work.

The Quarterly Journal of Microscopical Science. Edited by RAY LANKESTER, THISELTON DYER, E. KLEIN, and ADAM SEDGWICK. New Series. No. XC. April. London: J. and A. Churchill.

THIS part contains the following memoirs:—1. The Anatomy and Development of Peripatus Capensis, by the late Francis M. Balfour, an essay which has the melancholy interest of being the last work on which this talented naturalist was engaged before his death. It has been prepared from the manuscript left by Balfour by his friends Moseley and Sedgwick, who have been greatly assisted in their labours by Miss Balfour, whose beautiful drawings illustrate many of the points in the organisation of this curious myriapod, and who has materially aided the editors by her knowledge of her brother's views. 2. Klein gives an account of a Morphological Variety of Bacillus Anthracis, which is accompanied by a plate. Dr. Lankester appends a note on the statements made in this paper. Dr. Klein also gives a short account of a Pink Torula. 3. Marshall Ward, of Owens College, Victoria University, describes the characters of some of the Saprolegniæ, which are of interest as illustrating the salmon disease. 4. Vincent Harris, of St. Bartholomew's Hospital, describes a Method of Double staining nucleated Blood-corpuscles with Aniline Dyes. 5. Walter Gardiner gives the particulars of his Recent Researches on the Continuity of the Protoplasm through the Walls of Vegetable Cells. 6. Mr. J. E. Blomfield supplies a Review of Recent Researches on Spermato-genesis, chiefly those of Hermann on the Selachians, those of Renson on the Rat, and Max v. Brunn on the Paludina. 7. Mr. G. A. Dowdeswell gives a Note on a Minute Barb which he has recognised as existing at the extremity of the tail of the spermatozoon of the newt. 8. Mr. Ray Lankester concludes the part with a memoir on the Existence of Spengel's Olfactory Organ, and of Paired Genital Ducts in the Pearly Nautilus.

A Manual of the Minor Gynæcological Operations and Appliances. By J. HALLIDAY CROOM, M.D., &c., Lecturer on Midwifery and the Diseases of Women at the School of Medicine, Edinburgh, &c. Second Edition, Revised and Enlarged. Edinburgh: E. and S. Livingstone. London: Baillière, Tindall, and Cox. 1883.

WE have great pleasure in recording the fact of a second edition of this very useful and lucid little book, dealing with details in a delicate branch of practice, which are not always sufficiently given in more pretentious works. The book is larger by eighty or ninety pages than the first edition, and contains many new and beautiful illustrations. Dr. Croom modestly devised his book originally for students; but it may well be possessed by all practitioners, who will find in it carefully and briefly stated points and particulars of much utility in daily practice.

Minutes of the General Medical Council, of the Executive Committee, and of the Branch Council for the Year 1883. London: Spottiswoode and Co., Parliament-street.

OUR readers may be glad to know that the Minutes of the Medical Council for the year, including the Report of the Pharmacopœia Committee and the suggestions of Professors Redwood, Bentley, and Attfield on the contemplated revision, and Dr. Chambers's very interesting statement on unqualified assistants, are now to be had of the publishers. Mr. Miller, with his usual aptitude for editing, has very promptly put all the materials into a little volume, with an index, not perfect, but very useful, till the complete volume for the year can be had.

THE

SCOTTISH MEDICAL CORPORATIONS AND THE MEDICAL ACTS AMENDMENT BILL.

ON Tuesday afternoon a deputation from the medical corporations of Scotland had an interview with the Right Hon. A. J. Mundella at the Privy Council Office, Whitehall, to remonstrate against the preponderance which the Medical Acts Amendment Bill proposes to give to the universities in the representation upon the Scottish Medical Board. The Royal College of Physicians of Edinburgh was represented by Dr. Balfour (president), Dr. Haldane (vice-president), and Dr. Wyllie (secretary); the Royal College of Surgeons of Edinburgh by Dr. Heron Watson, Dr. John Smith, and Dr. John Duncan; and the Faculty of Physicians and Surgeons by Dr. Scott-Orr (president), Dr. Eben. Watson, and Dr. D. C. McVail. Several of these gentlemen explained that the bodies which they represented felt aggrieved that the Bill in question proposed to give eight representatives to the Scottish universities, but only three to the medical corporations of Scotland, in the constitution of the Medical Board for that country; whereas for the English Board equality of representation was proposed, as compared with six members to represent the universities; and five from the corporations upon the Irish Board. The deputation maintained that there was no valid reason for the disadvantageous position in which it was proposed to place the ancient corporations of Scotland, which had initiated medical education in that country, and had, moreover, by the high standard of their final examinations and otherwise, done much to raise and maintain the high professional standard reached there. In view of the jealousy hitherto shown by the universities towards the medical corporations, fears were expressed that, unless the representation were placed upon a more equitable footing, a limited number of professors might pursue a restrictive policy against the corporations, which latter were more truly representative, and were, indeed, larger teaching bodies than the universities. What the deputation desired was that an additional seat at the Medical Board should be given to each of the three bodies whom they now represented, making six members from the corporations as against eight from the universities. Drs. Duncan and McVail, speaking especially on behalf of the extra-mural medical Schools of Glasgow and Edinburgh, endorsed and enforced the views expressed by the previous speakers.

Mr. MUNDELLA, in reply, confessed that he was sorry to find a feeling of conflict and antagonism existing between the universities and the medical corporations of Scotland. He had hoped that it was not impossible for these two bodies to come to a mutual understanding as to their respective representation upon the Medical Board in carrying out the generally excellent provisions of a Bill which would still further enhance the high character and popularity of medical education in Scotland. With reference to the case put forward by the present deputation, the right hon. gentleman incidentally quoted from last week's LANCET a few lines on the "Abolition of Superfluous Corporations," to the effect that as two in England and Ireland had already been dropped out of existence, it was to be hoped that Scotland might be similarly relieved. One of the deputation took exception to this quotation, which he said did not represent the feeling of the great majority of the profession in Scotland. Whereupon Mr. Mundella rejoined that he quoted it not as his own opinion, but as appearing in a representative newspaper as indicating that there were apparently two sides to the question. As the Bill in question had only just been printed, and would probably not be dealt with by the House of Commons in Committee for several weeks, he refrained at present from expressing any opinion of his own, but would place the views of the deputation before the Lord President when they came to discuss any necessary modifications in the details of the measure. The deputation then withdrew.

ROYAL INSTITUTION OF GREAT BRITAIN.—The following gentlemen have been unanimously elected as officers for the ensuing year:—President: The Duke of Northumberland, D.C.L., LL.D. Treasurer: George Busk, Esq., F.R.S. Secretary: William Bowman, Esq., LL.D., F.R.S.

THE LANCET.

LONDON: SATURDAY, MAY 12, 1883.

IN our article of last week we briefly pointed out the sanitary benefits to the soldiers and sailors, and to the prostitutes themselves, of the Contagious Diseases Acts; and we now purpose to lay before our readers a short account of the improvements in decency and morality which have taken place in the districts under the Acts since the compulsory clauses have been in operation. In referring thereto, we must first consider the primary objection urged by the advocates of the repeal of the compulsory clauses—that such improvements are altogether independent of the Acts themselves and of the special police authorities to whom their administration has been entrusted, but are due to the action of the local authorities and to the efficiency of the local police only. It is even denied that in one place under the Acts any social improvement whatever has taken place, and the same is insinuated in regard to others, chiefly on the evidence of the town missionary at Woolwich, whose examination before the Select Committee clearly shows that he is so prejudiced against the system as to be incapable of forming an unbiassed opinion; whilst the testimony of clergymen, magistrates, guardians, and others, who live in the districts, and many of whom were at first opposed to the administration of the Acts, is passed over in the Minority Report of Mr. STANSFELD and his colleagues without any special reference, and for it is substituted the opinions of Mr. KRAUSE, the town missionary above mentioned. In the debate on Mr. PULESTON'S motion on Monday night last, every member for the districts under the Acts who spoke, whether Liberal or Conservative, protested against the decision of the Government. However much it may be regretted, it is evident that a counter-agitation will spring up in those towns which have experienced the advantages of the careful administration of the Acts during the past sixteen or seventeen years. In the cases in which social improvements are admitted the benefits claimed as resulting directly and indirectly from the Acts are set aside as not properly belonging to the inquiry, and the evidence is put down as "absolutely delusive, and calculated to mislead public opinion." The opponents of the Acts refuse to see that in addition to affording some protection for the army and navy, improvements in the health and behaviour of the prostitutes themselves, and the other social improvements described by those best acquainted with the working of the Acts, must necessarily take place, and that whilst they are faithfully administered voluntary agencies must have a much greater chance of doing good in such districts than in places where no compulsion exists. To set aside these considerations is so obviously unfair that we are astonished to find even such fanatical enthusiasts for the doctrine of civil liberty as the advocates for repeal adopting this line of argument. Supporters of a voluntary method must therefore reconcile themselves to the expectation on the part of the public that they are prepared to deal with these questions as well as with the prevention and diminution of disease, to which we referred in our article of last week.

From the report for 1880 of the Assistant Commissioner of the Metropolitan Police we find that 781 brothels have been suppressed in the places under the supervision of the Acts since these have been in operation. But this does not indicate all the features of the improvement that has taken place in this respect. The following table is copied from page 19 of the report:—

	Public-houses.	Beer-houses.	Brothels.	Public-houses used as brothels.	Beer-houses used as brothels.
Total in the various districts on the 31st of December of the first year the Acts were extended to each district.	2839	2510	1279	152	263
Total in the various districts on the 31st December, 1879.	2871	2050	498	23	6
Increase	32	—	—	—	—
Decrease	—	460	781	129	257

With an increase of 32 public-houses and a decrease of 460 beer-houses, a suppression of 781 brothels, of which 129 were public-houses and 257 beer-houses, is thus shown; and that the decrease is mainly due to the Acts is decided at once by the fact that the largest proportion by far in each district were suppressed in the first two or three years after the extension of the Acts to that district. (See Return of Aug. 11th, 1882.) Even in 1881, out of 23 public-houses and 11 beer-houses still used as brothels, 16 of the former and 4 of the latter were in the Chatham district, and the supineness of the local authorities in this matter cannot be more conclusively proved, inasmuch as they can practically cause the closure of any brothel, whilst the special police can only institute the necessary proceedings if they find the occupier harbouring a diseased prostitute. The same report of Captain HARRIS shows that in the eight years 1873–80, 1642 girls and women, who had been found in improper places and in bad company in the several districts, returned to their friends on finding that they were under the observation of the special police, before it was certain that they had commenced a career of vice. Of these 194 were under fifteen years of age, 628 were between fifteen and eighteen, and 414 were under twenty-one. The decline from 296 who were under observation in 1873 to 186 in 1880 is most important. The number of girls and women who discontinued to lead immoral lives on being cautioned, and who consequently were not registered, shows a similar satisfactory result. The total number is 1407 in eight years, of whom 33 were under fifteen, 284 were under eighteen, and 408 under twenty-one years of age. From 1873 to 1880 there is a decline from 219 in the year to 174. Since the Acts have been in force 1253 women on the register have married, 3046 have entered homes and reformatories, and 8393 have been restored to their friends. How far this good work is dependent on, and taking place side by side with, the extension of the Acts, may be seen by the immediately beneficial results in every place to which they have been successively

applied. The earliest places which were included were Portsmouth, Devonport, Sheerness, and Chatham in 1864 and 1865, Woolwich in 1866, Aldershot in 1867, Windsor and Shorncliffe in 1868, Colchester in 1869, and the other places were added in 1870. The effect of the introduction of the Acts into each place in succession should be carefully studied by those who are inclined to attribute the results to any local supervision. The presence of the special police evidently induced the local authorities to prompt action, and stirred up various voluntary societies to more sustained efforts in rescuing those who were in danger, and reclaiming those who had fallen. The number of beds available for occupation in the several lock hospitals has gradually increased from 40 in 1864 to 646 in 1872, and is still practically the same. We have no hesitation in expressing our firm conviction that the benefits derived by the unfortunate women themselves will be most seriously lessened by the repeal of the compulsory clauses. We cannot believe that a mere permission to enter a hospital will have the sanitary advantage of a compulsory order, and we cannot see how compulsory detention can be insisted on when compulsory examination is abolished. Another column in the same report is worthy of special notice in reference to this point. In 1868 and 1869 58 and 63 women respectively were discharged from the hospital as incurable within the period prescribed by the Acts. In 1880 only one such case is returned. Can anything more clearly show how beneficial the Acts have been to the poor women themselves? For the establishment of Government lock hospitals has gone hand-in-hand with the repressive measures of the Acts.

In conclusion, we must quote one or two paragraphs from Mr. LANE'S evidence before the Select Committee. "Before the Acts were passed, we used to receive a good many women from Aldershot through the Farnham Union. The women were in rags, they were covered with vermin, and presented the most frightful cases of sloughing sores and buboes that you could well imagine.....I saw the women from a number of districts when they were first placed under the Acts. In all of them the disease was very severe indeed.....The cases sent to us now are exceedingly mild compared with the others. Their general appearance and condition have changed; they are most of them clean and decent in appearance now, and they have certainly very much improved in manner. I should say that their moral condition, if I may so speak, has improved." We very much fear that in their repugnance to the principle involved in the Acts, the advocates for their repeal, and the supporters of voluntary efforts, have not fairly considered what the nation has a right to demand from them; so that the increased efficiency of the forces, the greater comfort and better health of the unfortunate women, the improvements in social order and decency, and the rescue and reclamation of the fallen, which we have shown to have taken place during the operations of the Acts, and to be directly or indirectly due to them, may not be lost or even imperilled. We shall be glad to find that the task is within their power, and to see them seriously undertaking its fulfilment.

THE hard bargain which has been struck by the Corporations with the Government will not increase the scanty affection of the profession for these greedy bodies. The profession will blame them and not the Government for the mutilation of the Bill in regard to the important question of titles. As the Bill originally stood, there were to be but two classes of titles in the Home Register—the title of the new licentiates, and in another column, Higher Titles, or titles which in the estimation of the Council implied a higher degree of knowledge than the possession of the mere licence will imply. Such a law would have made the Council a judge of the whole system of medical education and examination, from the minimum to the highest; so that if any universities under the new system make a virtua trade of their high prerogative of granting degrees and titles—as has often been done, and may be done again in the history of medicine—the Medical Council would have had an easy means of rebuke and correction in the refusal to register their degrees. It is to be understood that the bodies, universities and corporations alike, have objected to such a power being placed in the hands of the Council, and if the Bill passes in its present shape, the Register will contain as at present fifty or sixty titles of all sorts and sizes, between which an embarrassed public will be as unable to judge as at present. But this does not fully represent the nice conscience and fine feeling of the corporations. They have such a proper sense of shame at the great number of existing titles that the very thought of one more is intolerable to them. The easy way of getting rid of this scandal is to abandon a score of their common titles—twenty titles, say, out of sixty which they grant. But that is not their way. They have gone to the Government and represented the beauty of sixty-four titles and the insuperable objections to even one more; and they have unfortunately induced the Government to refuse to the new licentiate any title which he can register or otherwise use, with the object, of course, of driving the licentiate to their title-shop. This is a concession which, with all respect to the Government, it should not have made, and which it ought now to unmake. It is simply monstrous that men are to be required to pass a new examination because the old ones are disparaged, and then to be told that the old examiners are to have the titles to bestow, or rather to sell. This dissociation of the examining and the title-granting function is intolerable, and it is extremely important to have it understood and, if necessary, exposed in Parliament. As will be seen in another part of our columns, it is well understood by students, and they are bringing it under the notice of the Government. There is no answer to their complaint but the greed of the Corporations, who have still far too much left in their power by the Bill. We will not go so far as to say that the Bill should be imperilled by pressing any amendments on this subject, but we decline all responsibility for such an injustice as the refusal of a title to men who pass a Board of State authority, and we predict that the dissatisfaction to which it will lead will be acute, and will only be allayed by fresh legislation.

WHATEVER its shortcomings in other respects, the recent debate on the Pathology of Diabetes at the Pathological Society must be credited with having cleared the ground of much that was uncertain and doubtful, and indicated the path in which researches into the causation of the disease may in future be followed with advantage. As Dr. DICKINSON pertinently observed, diabetes must have a patho-

logy; but the question at issue is whether the primary condition is a chemical fault, or due to lesion of the cerebro-spinal system. Dr. DICKINSON, as is well known, is in favour of the latter view, and he bases his position, first, on the fact that the disease is persistent, notwithstanding entire changes in the environment of the individual, and the suddenness of the onset, generally following on some intense mental disturbance, such as grief, anxiety, fright, &c.; secondly, on the existence of certain lesions he had discovered in the brain. With regard to the first proposition, we do not think the persistency of a disease necessarily proves that it depends on changes in the permanent structures; indeed, the most persistent of disorders are generally those which are acknowledged to take their origin from a morbid condition of the blood, and only lead at last after long continuance to definite local lesions. Nor can the fact that the disease sets in suddenly be taken as evidence of its arising from a change of structure, nothing being more likely to produce chemical aberrations than violent emotions acting through the nervous system. With regard to the existence of well-defined nerve lesions in the disease, Dr. DICKINSON'S position is very generally questioned. It is not asserted that no such lesions are to be found, but that they are not peculiarly associated with diabetes. Thus, Dr. HALE WHITE stated that out of twenty-three post-mortem examinations made at Guy's Hospital on diabetic subjects, no changes in the nervous centres were detected; whilst he brought forward specimens from subjects in whose urine no sugar had been found which exhibited the special lesions. Dr. FREDERICK TAYLOR'S evidence as regards the result of post-mortem examinations at the same hospital was much to the same effect. He considered the majority of his specimens healthy, and only one of them deviated much from the usual standard. The experience of the London Hospital is very similar to that of Guy's. Dr. STEPHEN MACKENZIE, in one of the most effective speeches of the debate, in which he discussed fully the various changes found in the different organs of the body after death in diabetes in relation to cause and effect, stated that in fourteen cases in which the nervous system was examined no changes were met with; in six cases slight peri-ganglionic vascular dilatations were found, but it was doubtful how far they were due to the mode of preservation. Dr. SEYMOUR TAYLOR, of St. Thomas's, had failed to meet with the vacuolations described by Dr. DICKINSON; he spoke of the difficulty of successfully hardening and mounting specimens of the nervous system for microscopical examination, and was inclined to believe that many of the appearances regarded as morbid might be due to the method of examination. This point the committee that is to be appointed to examine the specimens and inquire into the methods of preparation employed by the exhibitors will no doubt definitely settle. If this committee should report that the changes observed by Dr. DICKINSON are not due to his method of examination, but are manifestly morbid, then the connexion of the disease with distinct nervous lesion must be again discussed with regard to the question of the change being a primary one or a result of the disease.

But if we have to discard the view of an originating nerve lesion, what other hypothesis can be advanced? Chemistry, or at least modern chemistry, has as yet advanced no definite theory; but it has not been idle, and those who have followed this line of research have collected many valuable facts, from which no doubt important conclusions will in time be drawn. Indeed, we are surprised that they have not already attracted more attention. Hardly a speaker alluded to the very important investigations, chiefly based on chemical research, that have been carried on by Dr. PAVY for many years, and which have led him to the conclusion that the phenomenon of diabetes is dependent on an afflux of blood, not properly venous, to the liver, and that this afflux is brought about by vaso-motor paralysis. Our space is too limited to state at length the experiments on which Dr. PAVY has founded his view, and we must refer our readers to his Croonian Lectures of 1878 and an abstract of his paper on the Physiology of the Carbohydrates, read this year at the Royal Society, and which appeared in THE LANCET of April 21st. This vaso-motor paralysis depends of course on nervous disturbance, but it is referred to the sympathetic rather than the cerebro-spinal system. Nor need it necessarily have origin in the large ganglia; there may be intrinsic conditions of the liver tissue or in the chylopoietic viscera generally sufficient to produce it. When the degree of vaso-motor paralysis is slight, we have a mild form of glycosuria; with a greater degree, the more acute and persistent form of diabetes. Dr. RALFE, also speaking from the chemical side of the question, contributed some original material to the debate. He especially insisted on distinguishing between the forms of diabetic coma, and pointed out that the ordinary form was generally the termination of long-standing cases, whilst the acute variety, attended with marked and peculiar symptoms, and which was infinitely rarer, was rather an accident than a natural feature of the disease, and was generally associated with anomalous and irregular forms of glycosuria, and that in these cases a fatty condition of the blood, the result of a chemical change in its composition, is most frequently met with. He also laid stress on the highly acid condition of the urine in diabetes, and hinted that this might furnish a clue to the chemical changes taking place in the blood.

In short, the general conclusions to be drawn from the debate are that diabetes is not associated with any definite structural lesion of any organ; that it is due to disturbance of functions of the liver, brought about apparently by a peculiar condition of the circulation in that organ; and that this condition, vaso-motor paralysis, can be induced experimentally in the living animal. The question was left open whether in diabetes this vaso-motor paralysis is caused directly by disease of the sympathetic or indirectly by the action of some chemical fault originating in the chylopoietic viscera, or in the blood itself.

THE first part of an interesting memoir on the nature and properties of the ptomaines appears in the last number of the *Archives Italiennes de Biologie*. The term ptomaines is applied to certain substances endowed with highly poisonous properties, resulting from the putrefaction of the brain, blood, albuminoids, and other analogous organic substances. MM. GUARESCHI and A. MOSSO, the authors of the essay in question, have endeavoured to separate the several products of decomposition, and, having obtained them in a state of comparative purity, to determine their physiological action on

the body. Before commencing their experiments they thought it expedient to prove the purity of the reagents used—ether, ethylic alcohol, chloroform, and benzine,—and their freedom from poisonous alkaloids. They operated on large quantities of these fluids—as much, for example, as fifty litres of alcohol—and satisfied themselves that in ordinary commercial alcohol there is a small quantity of a base which is either pyridine or some closely allied compound. Other investigators have demonstrated the presence of a mixture of substances belonging to the picoline series, and collidine has also been shown to be present. Amylic alcohol, in like manner, often contains pyridine, which may exist in it even in so high a proportion as 1 per cent., and which, being itself toxic, may lead to serious error.

The chloroform employed was found to be pure, but the benzine, like the alcohol, had to be freed from the pyridine it naturally contained. In these experiments on putrefying brain the authors experimented with about seventy-four pounds of human brain-substance, which was placed in a large glass receptacle, and put aside for one or two months at a temperature of about 50° F. The contents of the globe, reduced to a magma, had then an extremely unpleasant odour, and were treated with two volumes of purified alcohol acidulated with tartaric acid, in a sand-bath, for several hours, at a temperature of about 140° F. An immense quantity (147 litres) of alcohol was then added, and the whole evaporated to dryness. Fats were removed from the residue by ether, and the remainder was again and again submitted to the action of ether, which was each time evaporated and re-collected. The fluid, now freed from fat, was extracted with alcohol, and this again was exposed to heat, and the volatile products received in hydrochloric acid. There remained in the retort a brown acid liquid, which was once more extracted with ether, and the reactions of this etherial solution are given at considerable length. The principal substances obtained were ammonia, trimethylamine, and certain alkaloids or ptomaines, the last-named compounds being, however, too small in quantity to enable any analysis of their composition to be made.

The products of decomposing fibrin were next examined chemically, chloroform and tartaric acid being employed as extracting agents, and sufficient of the ptomaine was obtained to permit of an analysis, when it was found to have a composition represented in all probability by the formula $C_{10}H_{13}N$, a base which is isomeric with the *tetrahydromethylquinoline* of JACKSON—a compound that has properties similar to those of the ptomaine obtained from putrefying fibrin. The results of their experiments on the physiological action of the ptomaine obtained from decomposed human brain may be summed up in the single statement that in its effects on frogs it resembles that of curara, though incomparably more feeble. Its action was not only feebler than that of curara, but was much more transient. In the case of the ptomaine obtained from putrefying fibrin they ascertained that the chloroform extract of this ptomaine was much more powerful than the chlorhydrate, and in this instance also the general effects produced were comparable to that of curara.

DR. R. THORNE THORNE has been appointed Assistant Medical Officer to the Local Government Board in the room of Mr. Netten Radcliffe, resigned.

Annotations.

"Ne quid nimis."

STUDENTS AND THE MEDICAL BILL.

THE discussion of the Medical Bill by the medical students of London, reported in another column, is a very natural proceeding. Students are deeply interested in an improvement of the law and of the system by which medical schools and medical examinations are supervised. They have been very little considered by the Medical Council or by the Corporations. It is not remarkable that they should feel an interest in a Bill which is intended to remove the distraction of multiplied bodies, and the discredit and disparagement of unequal examinations. The direction of their criticism was such as to increase respect for their opinions. The prevalent demand of the students was for more stringent control over the preliminary examinations of those entering the profession. In their judgment this is the way to raise the character of medical education and of medical men. And, undoubtedly, there is much to be said for this view. The suggestion is not inopportune. The present Bill commits the care of preliminary examinations, in the first instance, to the Divisional Boards. On another point the feeling of the Medical Union Society seemed still more unanimous—viz., in disapproving that feature of the Bill by which the new licentiates will be registered without any title. Registration of what? Registration without a title is an anomaly. The students know well that the Government is not primarily to blame for such an anomaly as this. It is more than an anomaly; it is an injustice. The unsatisfactory working of existing Boards has necessitated the creation of a new one. In the formation of this all the wisdom of universities and corporations, of the Medical Council and the Privy Council, will concur. Yet after passing it the licentiate is to have nothing to show. He is to be plain Mr. Jones or Mr. Smith, and to be driven to the existing bodies to get a title to adorn his plate or to show the public. We warn the corporations that this device will not escape the condemnation of public and professional opinion. If they are bent on exacting a tax from the profession for work which is no longer to be done by them, let them accept the final examinations under the Bill instead of their own, and give their lowest diploma to be registered. But to demand that Government shall deny a title to those who have satisfied an examining board created for the satisfaction of the State is to lay the basis of further agitation and dissatisfaction. We are glad the medical students have made a representation to the Government on the subject. We judge the Government by its first proposals, which included a title for the licentiate, simple enough, but sufficient, leaving him with a reason for getting a higher one if he could. We trust they will listen to the arguments of the students, and revert with firmness to their first principles. The Bill is so valuable in many respects that we wish to see it pass even as it is rather than not at all. But they will be amply supported by public and professional opinion in securing for the new licentiates a title such as they can register and use.

PRESENTATION DAY AT THE UNIVERSITY OF LONDON.

THE annual ceremony of conferring degrees at the University of London took place on Wednesday last, the 9th inst., Earl Granville, the Chancellor of the University, presiding. He was supported by Sir James Paget, the Vice-chancellor, Dr. Storrar, Chairman of Convocation, Sir John Lubbock, M.P., Dr. W. B. Carpenter, and several other members of the Senate. Since the admission of ladies to the examinations of this university the ceremonial has been

very largely attended by the fair sex, who indeed formed the majority of the assembly. On this occasion no fewer than twenty-two ladies were presented, three undergraduates, fifteen graduates in Arts, two in science, and two in medicine, and all, with two exceptions, had donned the "cap-and-gown." Earl Granville made a brief speech, in which he referred at the outset to the great loss sustained by the university in the death of Sir George Jessel, and then congratulated the university upon having secured as his successor in the vice-chancellor's chair so eminent a man as Sir James Paget. He also particularly mentioned the name of Mrs. Scharlieb—who had obtained the degrees of M.B. and B.S., taking the scholarship in obstetric medicine—a lady who had entered on her studies at Madras with the intention of devoting herself to practice among the female population of India. Sir John Lubbock, as member for the University, also spoke, his remarks being mainly directed to pointing out the advantages accruing from education in science and modern languages. At the request of the Chancellor, Sir James Paget, who was warmly received, also addressed a few words in his new capacity, in which he spoke of the immeasurableness of knowledge as an incitement to unceasing effort on the part of those who may seem to have fulfilled all the aspirations of their early years.

ACCESSORY SUPRARENALS.

PHYTOGENESIS has been said to be the mechanical cause of ontogenesis. The development of the individual is the compressed development of the race. No doubt in the process of compression some features are suppressed, whilst others are thrown into relief, but even these characteristics may be capable of a good explanation. The light which comparative embryology may be able to throw on many questions of present obscurity may turn out to be not inconsiderable. In the *Quarterly Journal of Microscopical Science* for 1882, the lamented Balfour has contributed a paper on the Development of the Suprarenal Bodies in Mammalia, which is full of suggestiveness from an embryological stand-point. There seems to be no reasonable doubt that the cortical and central parts of the adrenal of higher animals are as widely different in their nature as any two tissues can well be. The Elasmobranch fishes possess a single organ of inter-renal situation, which in structure corresponds with the cortical portion of a mammalian suprarenal body; here there is a local and actual separation between the two constituents which supports the notion of their essential difference. In fact the medullary part of the suprarenal body is in intimate relation with the sympathetic ganglia of the abdomen, and may be regarded as a part of that neural chain. And this is a view which all pathological researches tend to support. The vital opposition of these two tissues of the adrenals becomes an almost indispensable feature for the maintenance of the notion that the accessory bodies found by Dr. Marchland in the broad ligament of the uterus are really of the nature of suprarenal bodies. The observations were made on infants either new-born or only a few months old. The bodies in question were always quite small, from one to three millimetres in diameter, of rounded shape and yellowish colour. In four cases the nodules were situated at the free end of the broad ligament, in immediate relation with the ovaries, and consequently in close association with the pampiniform plexus from which the ovarian vein starts. They are thus enclosed between the two laminæ of this peritoneal fold, and project more from the anterior than from the posterior aspect. One instance is given of their occurrence nearer to the body of the uterus. A case is mentioned where the accessory nodules were located one on each side below the kidneys, in near relation with the ovarian vein. Rokitansky has described these accessory adrenals in a position between the solar and renal sympathetic plexuses, and sometimes a large part of the suprarenal organ has been found to be spread out beneath the capsule of the kidney. The explanation offered by Marchland in Virchow's *Archiv* is that the additional adrenals are probably carried down to the broad ligament with, or in connexion with, the ovarian vein. Similar structures have not been found in the male, though their presence in some part of the course of the spermatic vein is not impossible.

UNIVERSITY OF CAMBRIDGE.

IN a letter addressed to the Vice-Chancellor of Cambridge University, Professor Humphry has signified his intention of resigning the Professorship of Anatomy in the University, a post he has held since 1866. The following grace was offered to the Senate at the congregation on Thursday, May 10th:—That there be established in the university a Professorship of Surgery, and that it shall be the principal duty of the professor to teach and illustrate the principles and practice of surgery, to apply himself to the advancement of the knowledge of these subjects, and to promote their study in the university. The special board of studies, with which the professorship is connected, shall be the special board for medicine. The professorship shall not be tenable with any other professorship in the university. The professor shall receive no stipend until the university shall otherwise provide. In the discussion on the subject of founding the professorship, in the Arts school, on Wednesday, April 25th, Dr. Anningson said, as he was the only member of the medical faculty present he wished to speak of the necessity of some such provision as that proposed by Dr. Humphry. The Medical School at Cambridge had increased vastly in the last ten years, and this increase was largely due to the personal influence of Professor Humphry. The offer which he had made to systematise the teaching of surgery was one to be gratefully accepted. He fully recognised the loss which the university might sustain by Professor Humphry's resignation of the professorship of anatomy, but the work of the professorship was so great that his physical energies were taxed by it to the utmost, and it was not unreasonable to suppose that Dr. Humphry would in any case be unwilling to continue this strain. He felt quite sure that as he had established the teaching of anatomy on a sound basis, so he would establish the teaching of surgery, and would leave a brilliant legacy to his successors.

ROTTING STRAW IN THE STREETS.

IT is devoutly to be hoped that the Municipal Bill, when we get it, may do something towards removing the anomalies which at present exist in the distribution of wood pavement throughout the metropolis. Whilst the inhabitants of wide and comparatively little-used thoroughfares in some parts have long been indulged with this luxury, such districts as those of Grosvenor-square and its neighbourhood, which in the season are thronged day and night with carriage traffic, are left to put up, as best they may, with the old roadway, the noise of which has to be subdued at the hands of those who are rich enough to do it by the application of straw. At the present time straw has been lying, exposed to the rain, and the sun, and the wind, for a week or two past, on one side of Grosvenor-square, and at the point where Park-street crosses Upper Grosvenor-street. We can understand that the parish authorities find it impossible to refuse the request for this indulgence where sickness is concerned, and as it appears to be nobody's business to see that the fouled straw is constantly changed for fresh material, the inhabitants of the neighbourhood have to put up with an annoyance to which we have several times called attention. The true

solution of the difficulty is of course the substitution of wood pavement for the macadamised roadway, and if we were not concerned with a matter of parochial interest, it would be astounding that such thoroughfares as Brook-street and Grosvenor-street had not long ago been provided with that which increasing traffic has caused to be a mere necessary of existence.

THE EFFECTS OF MENINGEAL HÆMORRHAGE TREATED EXPERIMENTALLY.

M. BONNOT, in a thesis for the degree of M.D., has published some experiments on the effects of injecting fluid blood beneath the dura mater in dogs, with a view of reproducing the symptoms of meningeal hæmorrhage. Some of the animals were, others were not, under the influence of anæsthetics. The effects did not appear immediately, but a certain period, termed by Bonnot the latent period, intervened between the moment of the injection of three to five cubic centimetres of fluid blood and the first signs of impaired function. The second period was the period of painful excitation. Soon afterwards tonic convulsions were observed, characterised by convulsive phenomena and respiratory syncope. The respiration was at first accelerated, but soon suddenly ceased. General convulsions of all the muscles then occurred, and a violent attack of opisthotonos was brought on. The heart at first preserved its rhythm, but, if respiration did not recommence, either spontaneously or induced by artificial means, death supervened, evidently from asphyxia; but if the respiratory process is maintained, the animal may recover, after exhibiting for a longer or shorter period the symptoms of coma, the coma being longer in proportion to the amount of blood injected. Thus, with fifteen cubic centimetres of blood injected beneath the dura mater, anæsthesia was complete and the coma was protracted for a long time. During this comatose anæsthesia the respiration was usually irregular, intermittent, and analogous to that form which is known as the Cheyne-Stokes' respiration. The period of tonic convulsions was always short; it supervened more readily if the animal was rendered anæsthetic by chloral, and especially if the subdural injections had been made rapidly, so as to produce an immediate change of pressure in the brain. In no case was M. Bonnot able to obtain evidence of paralysis.

MORBID ACQUISITIVENESS.

CURIOUS instances of what may be termed "morbid acquisitiveness" are sufficiently common. We now hear of an exhibition of cigar-ends collected during seven years, in the course of which the collector has walked nearly 12,000 miles and picked up 600,000 pieces of cigar averaging an inch and a half in length. It is difficult to determine whether this ought to be classed as a case of morbid acquisitiveness, or whether it is not rather an eccentricity. It is necessary to draw the line between idiosyncrasy and disease sharply, or we may be led into all sorts of errors and difficulties. Morbid acquisitiveness, in its true sense, is an irregular and disproportionate development of that propensity for picking up unconsidered trifles which is characteristic of some of the lower animals, such as the jackdaw and the magpie. The Darwinian hypothesis of development explains the presence of this propensity in man—who is a cumulative organism—and the theory of dissolution propounded by Herbert Spencer and applied by Hughlings Jackson explains the occurrence of this proclivity as a symptom—either in the form of "morbid acquisitiveness" or kleptomania—of degenerative disease, in which the superior edifice is, as it were, taken to pieces in detail, revealing in the process of its dissolution the faults and weakness of the integral developments of which it is composed.

"MUSCLE v. BRAIN."

THIS heading, which is a popular one, aptly illustrates the misconception that prevails in result of ignorance of the laws of physiological development. It is a radical error to suppose that one part of the organism can be or ever is developed "at the expense" of some other. One part may be neglected while attention is exclusively directed to another part, but the fault does not consist in the overcare of the one, but in the neglect of the other. It is important to recognise this, because the phrase "muscle *v.* brain" would seem to imply that if we have muscle we cannot have brain. It is needless to remind those who understand the physiology of the higher animal life that no such alternative is presented. Each and every part of the body grows as it feeds. The point which is too commonly forgotten is that it feeds as it works, and in that proportion only. If any part is unexercised, it cannot possibly be nourished in such manner as to produce full growth and good health. In the training of youth it is especially necessary to bear this in mind. To produce good brain tissue there must be good brain exercise. The work done should not be sufficient to exhaust the organ, or the faculty of recuperation will be itself weakened and exhausted, and then the function of repair will lag behind the function of special activity, with the result of deterioration instead of progressive development. The work done should not, as a matter of fact, exceed such limits as regards quantity or quality as shall suffice to stimulate growth without exhausting. An overburdened or overworked brain cannot be healthy, nor can one that is underworked. Fatigue—we mean mental weariness—should not be incurred by the young; that is, during the period of development. The same rule applies to muscle cultivation. Full exercise without exhausting fatigue is the best, and, indeed, the only, stimulant of growth. Other things being equal, the best organism, the healthiest man, will be one in which both brain and muscle have been developed side by side by a process of educationary training in which time and strength have been so utilised as to afford opportunity for growth in every direction, in what we call *mind*—i.e., brain function,—as well as in physical strength or muscle function. After the organism has passed through the stage of growth, and its several parts have been finally formulated, there may come a time when muscular activity will so drain the strength as to impoverish the brain, but this state of matters is not reached until long after the educationary period, and in a well-trained organism it will never be reached at all.

SMALL-POX AND VACCINATION.

AN interesting letter has been addressed to Sir Lyon Playfair by Dr. W. B. Carpenter on this subject. Taking as his basis a table, published by Mr. P. A. Taylor, in the *Nineteenth Century* for May, 1882, Dr. Carpenter shows the fallacy of Mr. Taylor's argument that the epidemic prevalence of small-pox during the years 1870–74 proves that vaccination has had no influence in preventing this disease. Dr. Carpenter argues that the marked irregularity in the rate of the reduction of deaths from small-pox from 1838 to 1869 is evidence that vaccination is responsible for this decline, by far the greatest fall occurring in the periods which followed the two principal legislative measures for the promotion of vaccination. With regard to the epidemic referred to, he produces evidence of the unusually fatal character of the disease amongst the unvaccinated, not only in England, but in other countries, and thus attributes the special prevalence during these years to the existence of a more intense virus. But, as Dr. Carpenter says, the best evidence of the influence of vaccination is to be found in the ages at which the vaccinated and unvaccinated respectively die; if vaccination afforded no protection, these ages would necessarily be

the same. As a fact, the Registrar-General's Annual Summary for 1881 shows that of 962 deaths among the unvaccinated three-fourths occurred under the age of twenty, "the disease showing the same fatality among the young at present that it used to do in pre-vaccination times," while amongst the vaccinated three-fourths of the deaths occurred above the age of twenty, "that is to say, among adults who had outgrown their original protection and had not (so far as was ascertained) renewed it by revaccination." Referring to the deaths which occurred among the German and French troops in the Franco-German war, 1870–71, Dr. Carpenter states that the total number of deaths from small-pox in the former army, in which revaccination is enforced, was 263, while in the latter army, in which revaccination is not compulsory, it was 23,469. Space will not admit of our following Dr. Carpenter further, but we are glad to call attention to a paper which is especially worthy of consideration at the present time. The evidence which is now being collected ought to be sufficient to convince our legislators that the neglect of vaccination will cost the lives of tens of thousands of persons and bring misery into many homes. It is difficult to believe that, with such facts before them as those which have been already produced by the Registrar-General, by Dr. Buchanan, and now by Dr. Carpenter, the poor and ignorant will not be protected from those who are doing so much to mislead them.

LEPROSY.

THE number of unanswered questions which still depend from the subject of leprosy is very great. All subsequent observation has only tended to support the conclusions of Cornil and Neisser, an account of which we gave in THE LANCET (vol. ii., 1881, p. 184). Those investigations established the fact that a bacillus was the invariable companion of the diseased tissues in leprosy. They left in doubt the questions of inoculability and contagion. Some recent experiments made by Dr. Otto Danisch, and recorded in the current number of Virchow's *Archiv*, are instructive, and for the most part corroborate what was previously known. Inoculations were made with various substances taken from a well-marked example of the mixed form of leprosy. Twenty-eight vaccinations performed with blood, tissue-juice, and some sediment of urine when that secretion was mingled with blood-colouring matter, were productive for the most part of negative results, although the fluids were introduced into the anterior chamber of the eye, the subcutaneous tissue, and the peritoneal cavity of rabbits and cats. In one instance, at the end of two months, small punctate markings were seen on the membrane of Demours (posterior lamina of cornea), which disappeared again in the course of a few weeks. Nine times a piece of the diseased tissue was planted either in the anterior chamber of a rabbit's eye, or in the subcutaneous textures of mice, rabbits, and cats, or in the peritoneal cavity of a cat. Two implantations into the anterior chamber were followed by local results in the iris and cornea, and by more widespread symptoms referable to implication of the central nervous system. The bacillus, which was stained with fuchsin after Ehrlich's method, was detected in the local growths, but not in the infiltration which was found at the post mortem examination about the base of the brain. The disease of the iris &c. was observed about two months after the implantation, and the general neurotic signs appeared a few months later. No change resulted from grafts placed under the skin of rabbits and mice, but in the cat some local effect was noted. In one the implanted tissue excited suppuration, and so discharge of the leprous texture; in the other, after four months, a new formation of granulation tissue, which abounded in bacilli, was noticed. The portion of tissue placed in the peritoneal space of a cat gave much the same result after about four months. These experiments seem to show that leprosy can be transmitted to animals at least as a local form of the disease. In conformity with the investigations of Köbner, these new inoculations prove (1) that the graft of leprous tissue can remain in the animal organism without the nuclei and bacilli losing the property of characteristic staining, and (2) that the bacilli can not only be preserved in the organism of cats and rabbits, but may also increase and multiply.

ANTI-VACCINATIONISTS AT HALIFAX.

AT the meeting of the Halifax Borough Bench on the 4th inst., the charge-sheet of the Court contained the names of eighteen persons to be prosecuted for non-compliance with the Vaccination Acts. Before these cases were proceeded with, the Mayor briefly alluded to the anti-vaccination demonstration which occurred on the 30th ult., when placards were displayed and a band of music was paraded through the streets, which so far roused the passions of the people as to interfere with the carrying out of the law. The Watch Committee of the Town Council had, the Mayor stated, decided that if those who were responsible for the disturbance refused to make a public apology their conduct should be brought to the notice of a higher tribunal in order that its legality might be determined. The valour of Bob Acres in Sheridan's "Rivals" is stated to have "oozed away," and the courage of the promoters of the Halifax disturbance seems to have vanished in like manner, for on the 5th inst. the following apology appeared in the local journals:—

"Halifax, 4th May, 1883.

"We tender to the Watch Committee of the Town our sincere regret that we should have in any way contributed to an obstruction of the due course of the law, by opposing or recommending opposition to the sale of goods taken under the authority of the law; and we promise that we will not repeat the offence.

"JOSEPH WALSHAW.
JOHN IMBERY.
JOHN WALSHAW."

We recommend the example of the Halifax Watch Committee to the attention of the town councils of other towns troubled by lawless outbreaks similar to those which have occurred at Halifax.

NOTTINGHAM LUNATIC HOSPITAL.

THE twenty-seventh annual report of this hospital, which is supported by voluntary contributions, and into which patients are received who, not being paupers, are unable to pay the whole expense of their care and maintenance, has just been issued. The structural additions and alterations which have been in progress for the last two years are now complete. Two wings, each containing a large dining-room and sitting-room, twelve single bedrooms, a dormitory for eight persons, with spacious corridors, nurses' rooms, lavatories, &c., have been added; special attention has been paid to the heating and ventilation of the various rooms; and the institution is now capable of meeting the requirements of forty additional patients—a result which has been attained at a cost of £9000, or, in other words, a reduction of the income of the hospital by upwards of £300 annually. The Committee appeal to those interested in so valuable an institution to make up the deficiency by donations and subscriptions. Two reports of the Commissioners in Lunacy are also published, in both of which the accommodation for patients, the dietary, and the general arrangements for their treatment and amusement are spoken of in terms of unqualified praise. Seclusion and restraint are referred to as not having been employed. The report, respecting the visit paid in October, 1882, states that nineteen of the patients pay each of them less than 30s. weekly, some less than 15s., and that the weekly cost of a patient is 30s.

within a fraction. The opinion of the Commissioners on the merits of the charity is expressed in the following terms: "We would be very glad to hear that this hospital attracted the notice of benevolent donors, for (as we have often stated) the provision for middle-class lunatics, of the grade above paupers, and yet very poor, is quite inadequate in this country." As the highest charge is £2 per week, and the rules for the admission of patients are exceedingly simple, we feel sure that the advantages presented by this hospital, of which Dr. W. B. Tate is the superintendent, will be still more largely taken advantage of in the future than they have been in the past.

MR. NETTEN RADCLIFFE.

THE announcement which we made last week as to the resignation of Mr. Netten Radcliffe, the assistant medical officer of the Local Government Board, has been received by all who knew him with feelings of deep regret, the more so as it has become generally known that Mr. Radcliffe's state of health is not only such as necessarily to preclude even a partial resumption of those labours which have won for him a place amongst the most distinguished living authorities on questions of public health, but also to prevent his enjoying the rest from official duties which he had so well earned. Even before the date of the Crimean War, when Mr. Radcliffe received honourable distinctions for his success in dealing with the question of hospital provision and administration, especially amongst the sick in the Turkish Army, he had devoted himself to the study of the health conditions under which his countrymen were then living, and during his career in the East he made himself so fully master of the special circumstances affecting epidemic disease in and about the Levant, that he ever after became an authority on questions affecting the spread of such diseases as cholera and plague. His early investigations into cholera in England were conducted with a skill and completeness which leave nothing to be desired, and his appointment, some fourteen years ago, to the post he has now relinquished, was at the time regarded as a well-merited recognition of his fitness to advise in the matters affecting the sanitary interests of the country. Since that date Mr. Radcliffe has written many reports which will take their place amongst the standard literature of sanitary science, and in many indirect ways he has laboured to further the progress of health both at home and abroad. His loss is much felt amongst his colleagues, for his abilities fully sustained the reputation of the department in which he served, and his genial and courteous bearing acquired for him a large circle of friends.

ADMINISTRATION OF ANÆSTHETICS.

OUR Glasgow correspondent writes:—"The Committee appointed by the managers of the Royal Infirmary to consider the subject of the administration of anæsthetics have given in their report. In almost all points it bears out the contentions of Mr. M'Ewen, the chairman, and tells against the position taken by the staff. In future, when a surgeon receives a new assistant, he will instruct him practically in the giving of anæsthetics, and grant him a certificate when satisfied of his knowledge of the subject. The ordinary clinical instruction by the surgeon is also to include demonstrations in the practical administration of anæsthetics. Instruction of this kind will be considered important as a qualification in the case of those who are candidates for assistantships. Only qualified assistants will be allowed to operate under anæsthetics in the absence of their chiefs, and then only in the presence of one of the dispensary staff, or of the superintendent, or of another qualified assistant. These are the chief changes to be adopted. *Per contra*, the representations of the staff have been so far yielded as that no change is to be made in the relative number of physicians and surgeons, and no rule is made as to the number of visits required of the surgeons on the days on which they receive accidents. The Chairman is thus practically victorious along the whole line. The Board of Directors have unanimously requested him to withdraw his resignation, and he has intimated his willingness to do so. And, further, it seems that a subscription has been set on foot to get up a public testimonial to Mr. M'Ewen in consideration of the many services he has rendered to the Royal Infirmary. It is just possible that the anæsthetic question will now come up at the Western Infirmary also, as a death from chloroform occurred in that institution on Wednesday last."

THE DRAINAGE OF BRIGHTON.

AN important movement has recently been made in Brighton, through the energy of the ex-Mayor, in the formation of a Sanitary Association, by which all hotels and lodging-houses can be inspected, and a certificate granted if the house is found in a good sanitary condition. This is a step in the right direction, and will afford to visitors security against infectious diseases and risks from sewer-gas. We wish success to the work. Whilst touching the health aspects of Brighton and taking into consideration the agitation produced last year by some remarks we were called upon to make respecting its system of drainage, we are constrained to ask what the Town Council has done to remedy the defects. The facts that our remonstrances caused the Corporation to order investigations to be made by Sir Joseph Bazalgette and Dr. B. W. Richardson, and that their reports, as well as the report made on our behalf by Mr. Bailey-Denton, confirmed our statement that certain improvements were necessary, justify our inquiry if action has been taken in this matter. We ask the question in the most friendly spirit, only wishing "the Queen of Watering-places" to be beyond suspicion of unhealthiness. The Town Council have the dead season before them until October; there is plenty of time, therefore, to make Brighton the most healthy and attractive seaside resort in England.

HONORARY APPOINTMENTS AT PROVINCIAL INFIRMARIES.

THE honorary surgeons of the Royal Albert Edward Infirmary, Wigan, have just experienced a position which is undesirable for any surgeons to be placed in who give gratuitous services. According to one of the rules the honorary medical officers require to be re-elected or elected at every annual meeting, just as the Board of Management and vice-presidents are. When this rule was passed the staff were assured that their re-election would only be a matter of form hence no grave objection to its adoption was taken at the time. This year, however, owing to an "over-supply of doctors," the injustice of this rule was felt. The Board of Management, on the recommendation of the Medical Board, had decided to propose to the annual meeting of subscribers that the number of honorary surgeons should be six, exactly the number of the existing staff for the past year. Owing, however, to a belief that seven were to be appointed, five new applications were sent in; and instead of the Board of Management intimating that there was no vacancy, they ordered ballot papers to be prepared for the annual meeting, which took place on the 2nd instant, and were about to place the names of the old members of the staff and new applicants on the same. The old staff considered this to be unfair, and at once agreed not to submit to this mode of re-election, but to resign rather than be balloted for with their juniors. It was, however, felt that this would not remedy the existing evil, which was a professional rather than a personal one; they therefore determined to submit their case to the gover-

nors and subscribers. This they did, and the fairness of their claims was at once recognised. Two of the senior members of the staff had resigned in the meantime; the meeting therefore elected them to the consulting staff and re-elected the remaining four, and balloted for the two vacancies from the five aspirants to the honorary appointments. A resolution also was submitted to the meeting and passed unanimously, "That it be an instruction from the annual meeting to the Board of Management and Medical Board to reconsider the rules affecting the honorary medical staff, and to call a special meeting of the governors to confirm the alterations required." In consequence of this resolution the remaining four agreed to take office. We are of opinion that annual re-elections to appointments of this kind cannot tend to the welfare of a hospital, nor will the zeal of the honorary officers be increased by the knowledge that at the next annual meeting their tenure of office might cease.

THE GOVERNMENT AND THE CONTAGIOUS DISEASES ACTS.

THE Government does not appear to recognise the ridiculous and morally untenable position in which it is placed by the policy adopted in consequence of the difference of opinion prevailing among its members. The compulsory clauses of the Acts are now to be left in abeyance, while the machinery as a whole is to be kept in motion. The inevitable result will, of course, be that voluntary submission to the Acts will place those who make this submission practically under Government patronage; and the very practices which the Government professes a desire to discontinue will be carried on under its patronage with something like a guarantee of health! While the Acts were compulsory and enforced on all, it was open to the Government to regard and represent its interference in the matter as a piece of State administration, but now that it only offers its services to those who are willing to accept them the matter stands on a totally different footing, and the service performed takes the form of a State examination and guarantee, conferring certain obvious advantages on the *protégées* of the Government. This is the net outcome of a policy of vacillation and half-hearted sentimentality.

THE MEDICAL PROFESSION AND FRIENDLY SOCIETIES.

WE publish elsewhere a report of a meeting of the practitioners in and about Plymouth in regard to one of those shabby Societies which aim at cheapening medical services, without respect to the just claims of doctors, or the means of subscribing members; which upset existing and respectable arrangements between practitioners and their patients or their clubs, and introduce new medical men tempted by their youth to take low terms, and who are often demoralised in a professional respect by such a system. There is no charity in such a system as this. And it is right that in every place where it is attempted dignified protests should be entered against it by resident practitioners. This movement comes in opposition to a different one, which has been very extensively making way—one which regards the medical man as worthy of far better pay than he has been in the habit of receiving from Friendly Societies.

MIDDLESEX HOSPITAL.

THE long-contemplated improvements in and additions to the out-patient department at the Middlesex Hospital have been commenced. A building is being temporarily erected in the courtyard of the hospital for the use of this department during the progress of the works, which will probably require several months to complete.

THE DROPPED CORPORATIONS.

THE propriety of dropping at least three corporations in the present measure for reorganising the licensing system of the profession cannot be doubted. Even our Scotch friends have been unanimous about the propriety of dropping the two Apothecaries' Societies. But they have not seen the force of the argument for applying the same rule to Scotland as to England and Ireland; though, to do Professor Struthers justice, he has recommended that the Glasgow Faculty should combine, as the Act of 1858 provided for, with the College of Surgeons of Edinburgh, and it is part of the Professor's recommendation that in any Conjoint Scheme they should charge only as one body. It would be unreasonable to deny that, if past services are to be regarded as a claim to perpetuation, the English Apothecaries have a stronger case than the Glasgow Faculty. They have for half a century examined in medicine fairly well the practitioners of England. But past services are not a *raison d'être* for the present and the future. Corporations are not meant to be eternal in their duration; and conservatively disposed men, Liberals or Tories, who try to save the Faculty of Glasgow, must remember that they can only succeed by taxing the profession for what is superfluous, by complicating schemes of examination, and by excluding from a seat in the Divisional Board the direct representative of the profession in Scotland.

BRITISH MEDICAL ASSOCIATION.

THE fifty-first annual meeting of the British Medical Association is to be held in Liverpool on July 31st next and the three following days. Dr. A. T. H. Waters is the President elect. An address in Surgery will be delivered by Reginald Harrison, F.R.C.S., and an address in Pathology by C. Creighton, M.D. The arrangements are as follows:—On Tuesday, July 31st, church service at the Pro-Cathedral, 10.30 A.M.; first general meeting, 3 P.M.; adjourned general meeting, 8.15 P.M. On Wednesday, Aug. 1st, second general meeting and address in Surgery, 11 A.M.; sectional meetings, 1.30 to 5 P.M.; soirée in the Arts Gallery by the President and local committee, 9 P.M. On Thursday, Aug. 2nd, third general meeting and sectional meetings, 10 A.M.; sectional meetings, 2 to 5 P.M.; public dinner in the Philarmonic Hall, 6.30 P.M. On Friday, Aug. 3rd, fourth general meeting, address in Pathology, and sectional meetings, 10 A.M.; concluding general meeting, 2 P.M.; soirée by the Mayor of Liverpool at the Town Hall, 9 P.M. On Saturday, Aug. 4th, excursions to various places of interest will be held.

"OVERHEAD TELEGRAPH WIRES."

WE have repeatedly called attention to the danger of overhead telegraph wires stretching across the public thoroughfares. At any moment, and in any weather, one of these engines of mischief may snap, and, swooping down on the passengers below, maim or kill. The facts that few breakages have already occurred and that little damage has been done do not warrant the confidence which is reposed in the strength of these wires and the integrity of their supports. We are therefore glad to notice that the Shoreditch Vestry is taking action in the matter. It is contemplated by that local body to send a deputation to the Home Secretary with a view to bringing under his consideration the rapidly increasing number of telegraph and telephone wires suspended over thoroughfares in the metropolis, and to point out that local authorities have no voice in the granting of permission to multiply the peril, and no power to enforce proper precautions for the public safety, whereas they would be held liable to compensate for damages if an accident happened. Obviously this is a monstrous state of affairs. Other vestries will, it is said, take part with that of Shore-

ditch in the endeavour to bring about some reform, and we heartily wish their efforts success. There can be no question that the peril is a real one, or that measures should be promptly taken to limit, if not entirely to remove, it.

AN ELECTRICAL PHOTOPHORE.

UNDER many circumstances the examination of the various cavities which open at the surface of the body is one of difficulty, chiefly on account of the want of sufficient illumination. It is not always desirable or convenient to take Mahomed to the mountain, and hence arises the value of a portable lamp which will enable us to penetrate into the recesses of cavities without disturbing our patients. M. Dujardin-Beaumetz lately presented an electrical photophore to the Academy of Medicine, which could be adapted to the forehead by means of an elastic band. The instrument consists of a cylinder, with a mirror at one end, a convex lens at the other; it is very light and small, and is fitted with a universal joint. The electric light is produced at a point midway between the mirror behind and the lens in front; the source of the electricity is a Trouvé's element charged with a super-saturated solution of bichromate of potassium.

THE SEWAGE QUESTION AT BLACKPOOL.

THE Blackpool Town Council, on the 1st inst., held an interesting discussion on the question of disposing of the sewage of that town. A recommendation made by the committee which had been investigating the subject, that the sewer outlet should be extended three hundred yards seawards, was adopted. The Mayor said that this question of disposing of their sewage was growing into an unfortunate one, and was getting to be talked about to a great extent in the town. He might, with perfect truth, have said that comments on this subject were not confined to the inhabitants of Blackpool. The cost of carrying out the proposed scheme was stated by different speakers at from £600 or £700 to £2580.

MIDWIVES AND PUERPERAL FEVER.

THE conviction by a Jury of Mrs. Goss, midwife, of Lancaster-road, Notting-hill, of manslaughter, raises afresh and painfully the subject of midwives' midwifery. Four cases of puerperal fever occurred successively in Mrs. Goss's practice, of which three at least terminated fatally. Mrs. Goss was warned by Dr. Owen Roberts and Mr. Joseph Ernest Bullock of the nature of the disease and advised to desist from practice. Mrs. Goss's case having passed into so serious a form as that of a charge of manslaughter before the magistrate at the Hammersmith police court, we refrain from comment. The first case died on January 19th, the last on April 24th.

THE SECOND READING OF THE BILL.

THOUGH the Government showed their earnestness in putting the Bill down for the second reading on Thursday evening, it was scarcely to be hoped that it would take place then, owing to the pressure of other business. It is intended to get an early day for the purpose after the Whitsuntide holidays.

DR. ARTHUR, in giving evidence at an inquest on the 2nd inst., at Brighton, on the body of a child who had been overlaid, remarked that it was a great mistake in parents to think that they were doing their children a service by taking them into bed with them, as the heat of the child's own body was always sufficient to keep it warm. He advocated the use of orange boxes as beds for infants, a subject to which we drew attention some time since.

IN a paper on "The Economy of Sanitation," read on the 25th ult. before the members of the Society of Arts, Captain D. Galton particularly directed attention to the following points: (1) How the sanitary works in our houses can be effected economically; (2) the saving to the community which arises from the diminution of preventable disease; and (3) the influence of uniformity of administration on sanitary progress. Captain Galton alluded to the great loss which sanitary science has experienced from the death of Dr. Farr; and, in conclusion, pointed out that the Metropolis Local Management Act was a retrograde step in sanitation, adding that the present system cannot be called economical, because the establishment charges of the offices of the thirty-eight parishes and districts outside the city amount to nearly £100,000 a year, and this exclusive of the cost of the Metropolitan Board of Works, of the staff belonging to the City, or of any actual work of sanitation.

FROM the report upon the quality of the water supplied by the metropolitan water companies during the month of March, presented by Colonel Bolton, we gather that the state of the water in the Thames, at Hampton, Molesey and Sunbury (where the intakes of six water companies are situated), was bad in quality from March 1st to March 9th, when it became good and remained in that condition for the rest of the month. The river was much polluted by the effluent waters bringing down from the land large quantities of marl and clay, as well as decayed vegetation and other impurities, which stained the water and rendered it exceedingly turbid.

BY an advertisement which appears in another part of our impression it will be seen that an effort is being made to raise funds for the purpose of restoring the parish church of Hempstead, which was almost destroyed by the fall of the tower in 1882. (See a letter on the subject by Dr. Richardson in THE LANCET of February 4th, 1882.) It is thought that the present will be a favourable opportunity for providing, by the restoration of the building, a worthy memorial of Harvey, whose remains lie interred in the churchyard, and with whose family the parish for centuries was connected.

AN indignation meeting of the inhabitants of Clapton Park was held on the 1st inst. to protest against the action of the Metropolitan Asylums Board in their determination to build an ambulance station at the Homerton Small-pox and Fever Hospitals with an entrance from Clapton Park, at an expenditure of £18,480. A resolution was passed condemning the action of the Board in seeking to establish an ambulance station in so thickly a populated neighbourhood when open land could be acquired at no great distance from the hospital and at much less cost.

AN important case bearing on the responsibility of landlords was heard and decided in the City of London Court on Tuesday. The plaintiff, the landlord, sued a tenant for rent due, and the latter filed a counter claim for damages for (1) breach of contract and (2) loss in health and pocket through the bad state of the drains. Mr. Commissioner Kerr gave judgment for the defendant, with costs, remarking that it is time landlords were taught that property has duties as well as rights.

THE annual dinner of the officers of the Army Medical Department will take place on Friday, May 25th, 1883, at the Inns of Court Hotel, Lincoln's-inn, at 7.30 P.M. The Director-General will preside. Dinner tickets can be obtained of Surgeon-Major W. G. Don, 6, Whitehall-yard, S.W.

WE are glad to learn that, with its usual willingness to hear all sides, the Government, in the person of Mr. Mundella, has consented to receive a deputation from the Medical Union Society after the holidays. They have good reason to be grateful to the Government for the Bill, but they will have more reason for this feeling if they can induce the Government to secure them such an amendment as they ask for in the petition published in our present number. The demand is, indeed, most reasonable.

THE first number of a new mid-monthly, *To-Day*, has reached us. Its programme is of the freest. "Wise thoughts boldly spoken" is its motto. And assuredly the article on science is not wanting in boldness, whatever else it may lack. The "Grim Tale" supplied we cannot undertake to characterise.

THE Sheffield Sanitary Authority have applied for power to borrow £150,000 for the purpose of constructing sewage-disposal works. The lime precipitation system is proposed to be employed.

THE Local Government Board, we learn (says the *Globe*), have declared Dr. Whitmarsh unfit to act as medical officer in the Brentford Union, and have accordingly removed him from that office.

THE Chair of Physiology in the Medical Department of the University of the City of New York, vacated by the appointment of Dr. J. W. S. Arnold as Emeritus Professor, has been filled by the election of Dr. Louis A. Stimson.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS TO THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

Enteric Fever and Diphtheria at Dartford, by Mr. JOHN SPEAR.—The large death-rate from certain of the infectious fevers in portions of the Dartford registration district led to this inquiry. During the past ten years enteric fever has been exceptionally prevalent in the urban district, and the rural district has been almost exclusively accountable for a large amount of diphtheria. As regards enteric fever in the urban district, it was found to be associated with conditions which tell of an incredible amount of neglect by the sanitary authority. Thus we read that nuisances from privy-pits and cesspools abound, that yards are flooded with sewage, that excremental filth is thrown into a stagnant ditch near to dwellings, that drains are ill-ventilated or not ventilated at all and badly constructed, and that shallow wells, known to be affected at each rise and fall of subsoil water, lie close beside choked drains or a few feet only from privies and cesspools, and this whilst the mains of the West Kent Water Company are lying in the neighbouring streets, and that excellent water is "everywhere available." But Dartford town admits of being divided into two portions. One is the centre and low-lying portion situated in an alluvial soil in the valley of the Darenth, the other is the continuation of the town up the hill-sides both to the east and west. The attacks from fever during 1880–82 in the low-lying parts were at the rate of 21·0 per 1000 of the population, those on the hill-sides only at the rate of 2·3 per 1000. There are several circumstances with which this remarkable difference of incidence may be associated, but one is worth recording. During 1880–81 a system of sewers was under construction and, the ground water in the low-lying parts of the town being only some three to four feet from the surface, considerable pumping operations became necessary. The subsoil water was also notably lowered during the construction of trenches for the sewers, and, since the completion of the sewers, periodic pumping has been maintained at the outfall. Under these circumstances it was found that an alternate rise and fall of the subsoil water had been maintained, and that there had been a rapid falling of ground water, which had previously stood at a high level in a sewage-polluted soil; conditions which, in Mr. Spear's opinion, had unquestionably led to the spread of enteric fever. The wells, indeed, had been lowered and the liquid from the neighbouring cesspools had been drained away, and it is therefore not difficult to imagine how exceptionally polluted must have been the water which washed, as it were, in its passage to the wells, a soil thus subjected to periodic fresh contamination. Out of every hundred householders, having water from local wells, thirteen suffered from enteric fever, whereas of households having a supply from the public mains only 2½ per cent. were attacked. As regards the rural sanitary district of Dartford and its diphtheria prevalence, it would appear that this disease was so rife there in 1879 that Dr. Thorne Thorne inspected the district at that date, and pointed out the conditions under which the disease was then prevailing. Mr. Spear finds the more recent prevalence to be practically a continuation of the former one, and some of the worst conditions existing in 1879 are still associated with the spread of the disease. Indeed, he says he made an all but barren search after improvements, the need for which had then been pointed out; and he reminds the authority that even now the infection is doubtless lying dormant in "many ill-conditioned spots of this rural district; its future history, whether as harmless matter or a destructive agent, waiting to be determined by the action of the sanitary authority." We hope the action awaited will be very different from that which has characterised the interval between 1879 and the date of this report.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Hebburn.—Mr. W. J. Sweet reports a death-rate of 19·6 per 1000 in this urban district during 1882. The birth-rate was 46·7. The mortality from that class of disease which is so evidently within the control of efficient sanitary administration is large, exceeding materially that obtaining in the fifty large towns of England and Wales. Scarlet fever is the disease which has mainly prevailed; no less than 144 houses were known to have been infected; and as a rule, the prevalence was associated with highly faulty conditions of sewerage. Mr. Sweet urges that inspection of houses where absentees from school reside, and also the giving of a certificate by the medical officer of health before any child who has suffered from infectious disease is allowed to return to school, should be enforced. The first suggestion is by no means new; it is carried out elsewhere; and all that is required is that, under Mr. Sweet's supervision, an inspector should be appointed to do the work. The other proposal presents certain difficulties, these being mainly due to the question of fee for such work, and to the fact that at times the medical officer of health resides at an inconvenient distance from the localities where the children in question live. Hebburn now possesses an infectious hospital. After years of delay a temporary building has been provided, and it will be interesting to learn its future use in the isolation of such diseases as scarlet fever and enteric fever. Experience has shown that, with the exception of small-pox, against the spread of which other efficient means are available, and perhaps also of typhus, temporary hospitals are by no means satisfactory, and their presence in many districts has, by preventing the erection of proper hospitals, done little more than constitute a long-continued hindrance to the efficient isolation of early cases of those fevers which, by reason of the heavy mortality they occasion, most urgently call for hospital provision.

Ilkley.—In this watering-place the death-rate during 1882 was only 12·2 per 1000, and even this takes cognisance of the deaths occurring amongst visitors. Infectious disease has also been markedly absent; and having regard to the fact that so many persons are dependent for their livelihood on the continued absence of such diseases from the town, Dr. Scott wisely urges the sanitary authority to prepare themselves, during a period when there is no panic, against any such spread of infection as may result from an imported case, by the provision of proper means of isolation.

Bollington.—Mr. James Allen, in his annual report for 1882, speaks in strong terms of the grave circumstances connected with the midden-privy system in this urban district; and it is quite evident from what he says that good

bye-laws regulating the construction of all such structures in the future, as also a public system of scavenging, are urgently needed. The population of Bollington is estimated at 3666; and although the present death-rate—namely, 18 per 1000—is below that which has prevailed during the past six years, it is clear that for such a district even this diminished rate is excessive. The defective conditions of house drainage, of privy and ashpit accommodation, and of water-supply, &c., must be dealt with more energetically before any permanent improvement can be expected.

Withington.—The general death-rate in this urban district of 15,234 inhabitants was 14·3 per 1000 during the past year, a rate which, though by no means high, exceeded that for the previous five years, the excess being mainly due to deaths amongst infants from so-called zymotic causes. Scarlatina was somewhat prevalent during the year, 61 cases being reported to Dr. Railton, the medical officer of health; but little could be done to prevent the spread of the disease by isolation, because the only hospital for infectious diseases which was available is the one at Monsall, belonging to the Manchester Infirmary, and this was far too distant. The same remark evidently applies to an outbreak of diphtheria, which attacked some twenty, and killed seven, persons; and it is to be hoped that the inadequacy of the present hospital provision, a matter which was pointed out as regards this and other districts around Manchester in the official report on the "Use and Influence of Hospitals for Infectious Diseases," will receive the attention of the sanitary authority, for if early cases of infectious disease cannot be received on the ground of distance from the hospital, it is obvious that disease is almost certain to spread. Parents have been shown willingly to consent to the removal of their children to proper hospitals, situated within a reasonable distance from their homes, and this sort of provision should everywhere be available. A good deal of excellent sanitary work is in progress in the district: nuisances are abated, removal of refuse is well carried out, and the sanitary arrangements in newly built houses are subject to efficient bye-laws. The local streams, however, remain much polluted, and there is every reason to believe that they constitute a distinct danger to health.

SANITARY PROGRESS AT CHRISTCHURCH, NEW ZEALAND.

Dr. Courtney Nedwill, the medical officer of health for this district, points in his annual report for 1882 to a rapidly diminishing mortality. In 1875 the death-rate in Christchurch amounted to 30·4 per 1000 of the population; in 1879 it had fallen to 20·1, and during the past three years the rates have been 17·9, 15·2, and 13·7 respectively. The deaths from zymotic diseases have also undergone a corresponding diminution, and this has corresponded with the enforcement of a provision in the local Public Health Act, throwing upon medical practitioners the responsibility of notifying such cases. A similar lowering of infant mortality has also taken place. Typhoid fever, formerly a scourge in the district, is now abating, the cases being in the main isolated ones, occurring with special incidence in localities just outside Christchurch, where the ground is sodden with slop refuse, and where there is either an absence of closet accommodation or where closets are leaky and defective. Diphtheria has been somewhat seriously prevalent, it having become practically endemic in the quarter of St. Albans, where it is maintained by the influence of the public school attendance. This quarter also presents those physical conditions which are now recognised as favourable to diphtheria; it is low-lying, damp, and badly drained, and it suffers besides from the effects of years of soil pollution from house slops and human excreta. An outbreak in another quarter is alleged to have been at once stamped out, because, owing to the system of notification in force, school closing could be resorted to at the onset. The works of sewerage which have been carried out have, amongst other things, led to a lowering of the subsoil water by as much as from three to five feet, and a corresponding effect in the diminution from death by pulmonary consumption is already in progress. As in England, infantile diarrhœa is a cause of death which occasions much local concern, and, according to Dr. Nedwill, it is in the main due to improper food, to impurity of air about dwellings, to filth in and around houses, and to the want of breast-milk. It is, however, impossible to read this report without seeing that in numberless ways sanitary progress is in steady operation, and this at a rate which might well put some towns in the mother country to shame. Cesspools are stated to have been practically abolished in the Christchurch division of the district, an organised system of scavenging is in progress, the sewage is being pumped to a series of sand hills, the various details of house construction and domestic sanitation are evidently under systematic supervision, infectious diseases are notified, and week by week the death returns are carefully examined. The cost of all this has evidently been somewhat considerable; but both in the saving of life and in the maintenance of the population in such a state of health as enables them to follow remunerative occupations, much gain is steadily being secured.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns, 5595 births and 3580 deaths were registered during the week ending the 5th inst. The annual death-rate in these towns, which had steadily declined from 29·2 to 22·7 per 1000 in the five preceding weeks, further fell last week to 21·7. During the past five weeks of the current quarter, the death-rate in these towns averaged 23·6 per 1000, against 21·7 and 22·6 in the corresponding periods of 1881 and 1882. The lowest rates in these towns last week were 15·3 in Bradford, 15·5 in Brighton, and 15·9 both in Portsmouth and Derby. The rates ranged upwards in the other towns to 26·0 in Liverpool, 29·1 both in Manchester and Sheffield, and 31·1 in Hull. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been but 351 and 344 in the two previous weeks, were 362 last week; they included 81 from measles, 76 from scarlet fever, 74 from whooping-cough, 54 from "fever" (principally enteric), 50 from diarrhœa, 21 from diphtheria, and 6 from small-pox. No death was referred to any of these zymotic diseases in Wolverhampton, Derby, or Halifax; whereas they caused the highest death-rates in Liverpool and Sheffield. Measles was most fatal in Liverpool and Sheffield; scarlet fever in Leeds and Sheffield; whooping-cough in Hull and Cardiff; and "fever" in Portsmouth and Sunderland. The 21 deaths from diphtheria in the twenty-eight towns included 16 in London and 2 in Liverpool. Small-pox caused 2 deaths in London, 2 in Birmingham, and 1 both in Liverpool and in Cardiff. The number of small-pox patients in the metropolitan asylum hospitals, which had been 82 and 73 on the two preceding Saturdays, rose again to 78 at the end of last week; 14 new cases of small-pox were admitted to these hospitals during the week, against 15 and 7 in the two previous weeks. The deaths referred to diseases of the respiratory organs in London, which had declined from 672 to 445 in the five preceding weeks, further fell to 371 last week, but exceeded the corrected average by 26. The causes of 104, or 2·9 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Brighton, Portsmouth, Bolton, and Cardiff. The proportions of uncertified deaths were largest in Wolverhampton, Derby, Preston, Halifax, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 27·5 and 27·6 per 1000 in the two preceding weeks, declined to 25·0 in the week ending the 5th inst.; this rate, however, exceeded by 3·3 the mean rate last week in the twenty-eight English towns. The rates in the Scotch towns ranged from 15·3 in Perth to 31·3 and 35·3 respectively in Glasgow and Paisley. The deaths in the eight towns included 90 which were referred to the principal zymotic diseases, showing a further considerable decline from recent weekly numbers; these deaths were equal to an annual rate of 3·8 per 1000, which was no less than 1·6 above the mean rate last week from the same diseases in the large English towns. The fatal cases of whooping-cough, which had ranged from 57 to 38 in the seven previous weeks, further declined to 25 last week, of which 12 occurred in Glasgow, 8 in Dundee, and 3 in Leith. The 38 deaths from measles, however, exceeded the number returned in any recent week; no fewer than 34 occurred in Glasgow, against 27 in each of the two previous weeks. The fatal cases of "fever," scarlet fever, and diphtheria were unusually few; the 4 deaths from "fever," and 3 of the

5 from scarlet fever were returned in Glasgow. The deaths from acute diseases of the lungs in the eight towns, which had steadily declined in the five previous weeks from 200 to 119, rose again to 132 last week, and exceeded by 15 the number in the corresponding week of last year. The causes of 93, or 14 per cent., of the deaths registered in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 37·2 and 31·2 per 1000 in the two preceding weeks, rose again to 34·0 in the week ending the 5th inst. During the first four weeks of the current quarter the death-rate in this city averaged no less than 35·1 per 1000, whereas in London and Edinburgh the mean rate was but 22·8 and 20·7 respectively. The 228 deaths in Dublin last week showed an increase of 19 upon the number in the previous week, and included 4 from "fever," 4 from whooping-cough, 3 from diarrhœa, 2 from scarlet fever, 1 from diphtheria, and not one either from small-pox or measles. Thus 14 deaths were referred to these principal zymotic diseases, against numbers declining from 31 to 18 in the five preceding weeks; they were equal to an annual rate of 2·1 per 1000, against 2·0 both in London and in Edinburgh. The deaths referred to "fever," which had steadily declined in the five preceding weeks from 13 to 6, further fell to 4 last week. The 4 fatal cases of whooping-cough also showed a decline from recent weekly numbers. The 2 deaths from scarlet fever exceeded, however, the number in any week since the beginning of February; and the fatal case of diphtheria was the first recorded since the middle of that month. The deaths both of infants and of elderly persons showed an increase. The causes of 38, or nearly 17 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

YEOMANRY CAVALRY. — Nottinghamshire (Sherwood Rangers): Ernest Martyn, Gent., to be Surgeon.

ARTILLERY VOLUNTEERS.—1st Cinque Ports: Honorary Assistant-Surgeon Frederic Wallis resigns his commission.—Frederic Michael Wallis, Gent., to be Acting Surgeon.

RIFLE VOLUNTEERS.—4th Cheshire: Surgeon and Honorary Surgeon-Major Robert Hopwood resigns his commission; also is permitted to retain his rank and to continue to wear the uniform of the corps on his retirement.—1st Worcestershire: Honorary Assistant-Surgeon John Laxon Sweet resigns his commission.—1st Volunteer Battalion, the Queen's Own (Royal West Kent Regiment): Eyre Ievers, Gent., M.D., to be Acting Surgeon.—2nd Volunteer Battalion, the Princess of Wales's Own (Yorkshire Regiment): Honorary Assistant Surgeon John Harrison Walker resigns his commission.

ADMIRALTY.—Staff Surgeon Robert Hall Moore, M.D., has been promoted to the rank of Fleet Surgeon in Her Majesty's Fleet, with seniority of April 29th, 1883.

The following appointments have been made:—Surgeon J. O. B. Williams, M.D., to the *Penelope*, vice Smith; Surgeon John S. Lambert, to the *Defence*, vice Gipps; Surgeon Howard J. McC. Todd, to the *Impregnable*, vice P. Todd; Surgeon William H. Norman, additional, to the *Amethyst*; John W. Williams, to be Surgeon and Agent at Ardmore, vice Poole; Staff Surgeon Richard John Barry, to the *Nelson*, for service in the *Miranda*, the appointment of Staff Surgeon Grant being cancelled.

KING'S COLLEGE HOSPITAL.—The annual dinner of the friends and supporters of this hospital was held in Willis's Rooms on the 3rd inst. The Prince of Wales occupied the chair and, in proposing the toast of the evening, made an eloquent appeal on behalf of the charity. The income required amounts to £15,000 per annum, but during the past year only £7500 was received from all sources, and the capital of the hospital has been reduced by recent sales from £40,000 to £18,000. His Royal Highness announced that the subscriptions handed in to the treasurer during the evening, including a donation of £500 from the Goldsmiths' Company, amounted to £4400.

UNIVERSITY OF LONDON: MEETING OF CONVOCATION.

THE annual meeting of Convocation of the University of London was held on the 8th inst. After the reception of the report of the Annual Committee,

Sir FARRER HERSCHELL, Q.C., M.P., moved, and Dr. F. STOCK seconded, the following resolution, recommended in the committee's report:—"That this house desires to record its deep feeling of the loss sustained by the University of London in the death of the late Vice-Chancellor, the Right Honourable Sir George Jessel, M.A., F.R.S., the Master of the Rolls. The late Vice-Chancellor had taken, as a member of the Graduates' Committee, an active part in the movement which procured by means of the Charter of the year 1858 the recognition of the graduates as constituent members of the University, and the services which he rendered to the University as a member of this house, as a senator, and as vice-chancellor, have confirmed and deepened the sense felt by this house of the great loss the University has experienced in consequence of his death. That the chairman of Convocation be requested to forward a copy of this resolution to Lady Jessel, with the very respectful sympathy of this house with her and the family of the late Vice-Chancellor in their great loss."

The resolution was supported by Mr. T. Smith Osler, Dr. Tomkins, and Dr. Quain, who referred especially to the invaluable assistance rendered by the late Vice-Chancellor to the Medical Faculty, and to the active share taken by him in the late Royal Commission on Medical Education.

The resolution was carried unanimously.

A resolution in favour of admitting graduates in music to Convocation was then carried, on the motion of Mr. CHRISTIE, seconded by Mr. MAGNUS.

Dr. M. BAINES moved, and Mr. H. MORRIS seconded, the following resolution: "That in the constitution of any Medical Board for England under the Medical Bill now before Parliament no arrangement will be considered satisfactory by Convocation which does not provide for the appointment on it by this University of at least two representative members."

Dr. BUCKELL moved an amendment to the effect that Convocation cordially approved of the Medical Bill, but required that at least two members of the University should be on the Medical Council.

After a short discussion, in which it was pointed out that the amendment would pledge the University to all the details of the Bill, many of which did not come under its cognisance, the amendment was withdrawn, and the resolution carried *nem. con.*

The Chairman (Dr. STORRAR) mentioned that the Senate had already passed a resolution to a similar effect.

A scheme for the institution of local examinations, which had been drawn up by a special committee, was then considered, and ultimately referred to the annual committee to report thereon to Convocation.

ADMINISTRATION OF ANÆSTHETICS IN HOSPITALS.

THE committee appointed by the managers of the Glasgow Royal Infirmary to inquire into the practice of the various large hospitals in regard to the administration of anæsthetics, especially chloroform, has accumulated some very interesting and valuable information on the subject. Replies to a series of nine questions were received from the authorities of the following hospitals:—Glasgow Western Infirmary, Perth Infirmary, the Edinburgh, Dundee, Aberdeen, Greenock, Dumfries, Manchester, Liverpool, Bristol, and Sheffield Royal Infirmaries; St. Thomas's, Guy's, Westminster, King's College, University College, and St. Mary's Hospitals in London; Leeds General Infirmary, and Newcastle-upon-Tyne Infirmary, and St. Vincent's Hospital, Dublin. Of the information thus furnished we make the following *résumé*:—

Question 1. Are there any formal regulations issued with the sanction of the directors of your hospital with respect to the use and administration of anæsthetics, especially chlo-

reform? To this the general reply was in the negative, with these exceptions: at Aberdeen they "have a regular chloroformist for all staff operations;" at St. Thomas's they have two anæsthetists, senior and junior, with a complete set of rules for their guidance; at King's College a special administrator is appointed; at St. Mary's the medical superintendent seems to act as anæsthetist; at Leeds the house-physician administers anæsthetics on operation days, &c., while the assistants are permitted to do so only in the presence of their seniors; at Newcastle and at St. Vincent's, Dublin, much the same rule prevails.

Question 2. Is there any special instruction given in the hospital, or in the medical school, on the above subject? The answers show that in Glasgow Western, Dundee, Perth, Greenock, Dumfries, Bristol, and Sheffield Infirmaries, and in St. Mary's Hospital, no special instruction is given; in the others it is given in some form or other. Dundee and St. Vincent's have no medical school.

Question 3. Are the resident medical and surgical officers permitted to administer chloroform without the presence of the visiting surgeon, or other member of the senior staff of the hospital? And, if so, under what restrictions, if any? On this important point we learn that in *none* of the hospitals named, except St. Vincent's and Dundee, are there restrictions placed on the resident surgeons in the giving of chloroform. In Glasgow Western Infirmary it is required that two residents shall be present. In Dundee there is but one house-surgeon, and he administers only in presence of the superintendent or one of the staff. At St. Thomas's, the "qualified resident officers" administer anæsthetics without the visiting surgeons; at Guy's, the residents may do so in absence of their seniors, "when absolutely necessary;" in Westminster, they may do so "when occasion may arise—e.g., for the performance of some minor surgical operation, the reduction of a dislocated limb," &c.; in King's College, they do so "in emergencies."

Question 4. Are such resident medical officers assistant or principal officers? The almost universal answer is that the residents are assistants, not principals. In University College they are principal officers. In some of the hospitals there are two classes of residents, the house-physicians or surgeons, qualified, and the assistant house-physicians or surgeons, who may be unqualified.

Question 5. Are such resident medical officers, in every instance, men legally qualified to practise medicine and surgery? And for what period have they practised or been qualified to practise? Or has any special instruction in the use of anæsthetics been required of them as a qualification for their appointment? With the exceptions of the University College Hospital, Leeds General Infirmary, and Dumfries Royal Infirmary, all the hospitals require that their resident officers shall be qualified. In Greenock the senior is qualified, the junior is not. The residents are, as a rule, recent graduates. In Dundee Royal Infirmary, Guy's Hospital, University College Hospital, Leeds General Infirmary, and St. Vincent's Hospital, special instruction in the administration of anæsthetics is given, or insisted on as a qualification; in the others it is not.

Question 6. Is it permitted to assistants not legally qualified in surgical wards to administer chloroform or other anæsthetics? and, if so, under what restrictions, if any? Here the general answer is decidedly in the negative. In University College Hospital chloroform may be given by unqualified men, under "no restriction"; in Aberdeen and Newcastle they do so only under the supervision of the surgeon in charge; in the Liverpool Royal Infirmary senior students may do so under the superintendence of the house-surgeon, and frequently in the absence of the honorary surgeon in minor operations. In Bristol they do so for teaching purposes, with the consent of the surgeon only. In Dumfries there are no restrictions on the house-surgeon or his assistant. From Perth Infirmary we have the astounding announcement that "the matron gives chloroform frequently, but always under the superintendence of a medical officer."

Question 7. Is there any specialist appointed for the administration of anæsthetics? There are "special" chloroformists at four only of the hospitals addressed—namely, at Aberdeen, and in St. Thomas's, Guy's, and King's College Hospitals.

Question 8. Have fatal accidents occurred in your hospital during the medical or surgical administration of chloroform? and, if so, has the occurrence of such accidents led to any practical (even if not formal) restrictions as regards its administration, as aforesaid? In Dundee, Perth, Aberdeen, and Leeds Infirmaries, and in King's College and St. Vincent's Hospitals no deaths from chloroform have occurred. In the others deaths have occurred, "and will occur, from time to time," but with the exception of the case of St. Mary's Hospital no additional restrictions have been imposed on this account. In Glasgow Western Infirmary there have been two such deaths in the last eight years and a half; in both cases one or more of the visiting surgeons were present. In the Liverpool Royal Infirmary there have been two deaths, one from chloroform and one from ether, in the last five years. In the Dumfries Royal Infirmary there was one death from chloroform; "on that occasion the whole resident and visiting staff was present." In Guy's the deaths from anæsthetics "amount to one or two a year."

The ninth question is statistical in character, referring to the number of surgical cases treated, the number of beds in hospitals, &c., and is thus of less general interest.

The practice of most of the large hospitals with regard to the administration of anæsthetics, as disclosed in this report, is found to be on the whole much in accordance with that which has for many years prevailed in the Glasgow Royal Infirmary, where this inquiry originated. Here the house-surgeons, five in number, are usually qualified, though occasionally, from want of candidates, unqualified men have been appointed. Since the payment of board-money by the residents has been abolished, there should now be a larger number of suitable qualified candidates for these posts. There have practically never been any restrictions placed on the discretion of the house-surgeons in the use of anæsthetics for minor operations, though it has long been the practice to have at least two residents present at such cases. There is no special chloroformist, the house-surgeons usually giving chloroform at major operations, and for each other in minor operations. Chloroform is occasionally given by senior students (dressers), under the supervision of the house-surgeon and staff-surgeon. Instruction in the use of chloroform has always been given by the surgeons in the wards, and in their clinical lectures.

THE TUBERCLE DEBATE AT WIESBADEN.

THE Congress of German Physicians held its second annual meeting at Wiesbaden recently, the session having commenced on the 18th ultimo, under the presidency of Professor Frerichs of Berlin, who delivered a short opening address in which he pointed out the scientific gains accruing from such assemblies, and the important subjects—tuberculosis, diphtheria, and the abortive treatment of the specific fevers—that were to be specially debated, subjects as important to the public as to the medical profession. At the close of the Professor's remarks the debate on Tuberculosis was entered upon.

The debate was opened by Dr. Rühle of Bonn, who, after a brief historical survey of the doctrine of the infectivity of human tuberculosis, said that Koch had accomplished that which had been sought by the experiments of Klebs, Cohnheim, and others—viz., the discovery of a specific tubercular virus, the tubercle bacillus; and declared against the views held by some, that the bacillus was only a concomitant and not the cause of tubercle. He therefore held it proved that tuberculosis was an infective disease, and that it was transmissible from man to man, although its mode of entrance was not established. He did not think it proved that human tuberculosis could be excited by feeding on the flesh or milk of tubercular cattle. Tuberculosis may be localised and curable, but in prophylaxis lay the sole means of treatment.

Dr. Lichtheim of Bonn, who followed, also spoke of Koch's discovery as being the last link of a long chain of research tending to establish the infective nature of tuberculosis. He thought the contagiousness of phthisis gained much support from these researches, and that it explained the occurrence of many cases far more reasonably than the doctrine that tuberculosis may remain latent in families for more than one generation; but as the influence of heredity could not be disputed, he was bound to admit the existence of a tubercular tendency or disposition to be the subject of infection.

Dr. Mordhorst of Wiesbaden pointed out that the causes which predispose to infection require elucidation, and that

some clue might be gained by ascertaining the conditions under which bacteria exist. Thus it has been found that they require a stagnant medium for their development, and it may be that defective aeration at the apex of the lung, conjoined with feeble circulation, favoured their arrest and development in this region.

Dr. Fraentzel of Berlin stated that he had been making experiments, in conjunction with Drs. Koch and Gaffky, to ascertain the value of treatment by inhalation of bactericidal substances, such as menthol, camphor, naphthalin, creasote, anilin, and carbolic acid; and although the experiments had been numerous and long-continued, the results were negative.

Professor Klebs of Zurich, who, as is well known, has not given his support to the specificity of Koch's bacillus, next spoke. He thought it proved that bovine tuberculosis was incommunicable, and referred to experiments by himself, Cohnheim, and Gerlach as favouring his belief. He also maintained the view that a certain disposition to tubercular infection was necessary, and that the virus found entrance into the body through the intestines.

Dr. Seitz of Wiesbaden drew attention to the fact that whereas in other infectious diseases the question of contagion had long been admitted without the virus being discovered, in tuberculosis the virus has been found, but contagion is disputed. That explains the position taken by many practitioners against the infection theory. The alleged cases of contagion between married persons prove nothing, for marriages mostly take place in those years of life in which tuberculosis most commonly arises. But there is no doubt about heredity. Practitioners could afford most important service towards the solution of these etiological questions.

Dr. Ziegler of Tübingen did something to raise the debate to firmer ground by giving a clear statement of his views upon the mode of origin and dissemination of tuberculosis within the body. Taking the lungs as an example, he distinguished three modes of invasion—by the blood, lymph, or respiratory tracts. That which was disseminated through the blood he termed the embolic form, which occurred most often as miliary tuberculosis, but sometimes in the form of scattered masses manifestly embolic from their arrangement. He had found bacilli in these cases, and believed that the virus was carried to the lung from the intestines. The second variety consisted in tubercular lymphangitis; but the most important was that of infection through inhalation. The disease, once established locally, might of course be disseminated by the blood or lymph streams, or indeed by the further inhalation into the bronchial passages of products of softening.

Dr. Hiller of Berlin described some therapeutical experiments upon cases of phthisis made at Prof. Leyden's clinic with anti-parasitic remedies. Most gases could not be used on account of their poisonous properties; sulphuretted hydrogen produced no result. The following substances were injected into the lungs:—Sublimate, iodoform, bromine, alcohol, sulphuretted hydrogen, methyl-alcohol, arsenic, boracic acid, and salicylate of soda; but the sputa were never free from bacilli. Corrosive sublimate, the most powerful anti-bacterial substance, excited too much irritation in the lung, but its subcutaneous injection gave some results. Injections of alcohol into the lung were better borne, save in the case of an epileptic who was attacked by fatal convulsions after the injection.

Dr. Schott of Frankfort recommended salicylate of soda combined with digitalis.

Dr. Graf of Elberfeld anticipated the detection of bacilli in erythema nodosum, as that affection is often followed by tuberculosis.

The debate was then closed by brief replies from Drs. Rühle and Lichtheim, and without having led to the anticipated contention between the upholders of the specific nature of the bacillus and their opponents. Perhaps one reason for the subject having received comparatively little attention at Wiesbaden may be found in the fact that during the past few months the journals have teemed with contributions upon it; and it might have been felt that no more can at present be said upon it. The title of the debate, however, certainly led one to expect from it more fruit. It ran: "On Tuberculosis; the Influence of the Discovery of the Tubercle Bacillus on the Pathology, Diagnosis, Prophylaxis, and Treatment of the Disease." It can hardly be pretended that these important matters were sifted as they might have been. Moreover, many of those whose names have been most prominent before the world i relation to this subject were conspicuous by their absence or their silence. We would suggest a renewal of the discussion at the Copenhagen International Congress next year, as one means of eliciting more definite statements upon the questions in dispute.

THE BROWN ANIMAL SANATORY INSTITUTION.

THE Report of Dr. Roy, the Professor-Superintendent of the Brown Institution, is an interesting record of the work done during the past year, as the following abstract will show:—

"The number of animals brought to the Brown Institution for advice and treatment during the year 1882 amounted to 2803. This total comprised 1448 horses, 64 donkeys and mules, 14 goats, 169 cats, 665 dogs, 443 chickens and various smaller animals. Many of the cases were seen several times, so that the total number of visits for treatment has been 4588. The patients admitted into the hospital of the institution numbered 172, comprising 44 horses, 106 dogs, 20 cats, and 2 goats. Of these, 121 were discharged cured or convalescent; while of the remainder, 9 were relieved, 24 died, and 14 were destroyed or discharged as incurable. In 1881 the number of cases of glanders and farcy showed a considerable diminution, and this has been fully maintained during the year 1882—a fact which may safely be ascribed to the continued care and watchfulness of the supervising police and other authorities. The number of cases of rabies, on the other hand, shows a slight increase over the number of cases brought to the institution during the year 1881. That there has not been a still greater augmentation in the number of cases of this disease is a matter for congratulation, considering that in no single case (owing to ignorance of its nature) were any precautions taken by the owners of the affected animals to prevent infection. In every case the animals when brought to the institution had been for several days previously in a condition to propagate the disease; and, with regard to several of them, we were informed that they were known to have bitten one or more persons or dogs. It cannot be expected that the information regarding this disease, which has been distributed along with a statement of the advantages, rules, &c., of the institution, should reach more than a very limited number of persons; and it is much to be desired that Her Majesty's Government should take some steps fitted to diminish the ignorance and misapprehension which still so widely exist regarding the symptoms of this disease and the precautions which should be taken after it has been recognised. This might be accomplished if the recommendation of Dr. Burdon Sanderson—namely, that a short description of the earlier symptoms of rabies should be printed on the back of every dog licence—were adopted. The number of cases of distemper shows a slight increase. It is to be regretted that the majority of these cases are brought to the institution either towards the end of the febrile stage or when the disease has become subacute, whereby the amount of benefit which may be obtained by appropriate treatment is considerably diminished. It may be added, as indicating the extent of the ravages of this disease and the great desirability of finding some means of checking it, that, large as is the number of cases under this head, they do not fully represent the mischief which this disease produces, since many of the cases which are classed under other heads (and more especially as diseases of the nervous system) were really the sequelæ of an antecedent attack of distemper.

"With regard to the scientific work of the institution, I have to report that the examination of morbid specimens sent to the institution, or removed from the patients by surgical operations or post mortem has received close and continuous attention. In this work I have to acknowledge gratefully the assistance which I have received from Messrs. Makins and Lingard, as well as from the Veterinary Assistant, Mr. Batt. The number of specimens sent to the laboratory during the year 1882 has been very considerable. Amongst the most interesting were one or two of Actino-mycosis—a disease which had not previously been recognised in this country, the cases in which it was present having been classed as tubercular stomatitis, or under some other erroneous designation. Since we called attention to its existence several other cases have been met with, and the true nature of a disease which is by no means rarely encountered in

cattle is rapidly being recognised by veterinary surgeons throughout Great Britain. This may serve as an instance of the importance for veterinary medicine of a systematic examination of morbid specimens from diseased animals such as is being carried out at the Brown Institution. The annual course of lectures required to be given in connexion with the institution was delivered in the theatre of the University of London on the 20th, 22nd, 24th, 27th, and 29th November, 1882, the subject chosen being the Pathology of the Heart, upon which I have made a number of observations in the course of the year. These observations, which form a continuation of a series of researches which I have been carrying on abroad for the last four years, have brought to light a large number of facts, which, it is believed, are of considerable importance for comparative and human pathology, as well as for the treatment of diseases of the heart in the lower animals and in man. The results of these observations show what was previously unknown) that the nervous system has he power of directly assisting in the compensating mechanism which comes into play in cases of valvular disease of the organ, and that this influence of the nervous system may be brought into action by means of appropriate drugs. These observations have also brought to light a large series of facts regarding the nature of the compensating mechanism which comes into play in cases of disease of the orifices or walls of the heart, and which mechanism plays the chief *rôle* in counteracting the effects of disease of the organ, and in some cases leading to ultimate cure. Many facts have also been gained regarding the influence of remedies on artificially produced disease of the heart. Besides these, Mr. Batt and I have made a series of researches on the best means of securing protection from anthrax in sheep by inoculation of mitigated virus. The results of these observations, which form a part of a larger series of investigations by Dr. Klein on the changes in the form and attributes of anthrax bacillus under various conditions, have been published by us in the form of a preliminary report in the Journal of the Royal Agricultural Society. The research on the means of obtaining protection from distemper by inoculation has given satisfactory results, which are not, however, sufficiently worked out to be referred to at present. The inquiry is being continued. Mr. Makins and I have also made a small number of observations on the nature of the vascular changes which accompany acute nephritis. These observations, which are not yet completed, have shown *inter alia* that the renal vessels are not paralysed even when the most intense congestion is present in cases of acute nephritis, but that they react as readily as in health to vaso-motor influences either direct or produced through the medium of drugs which affect the vaso-motor nerves. Many other points connected with the relation between inflammatory congestion and the changes which take place in the tissue elements in cases of inflammation have also been brought to light, and will be published as soon as the inquiry is completed. Besides the investigations above referred to, an inquiry into the pathological histology of Actino-mycosis has been undertaken at my suggestion by Messrs. Lingard and Batt, which, judging by the results already obtained, promises to add some important facts to our knowledge of this recently discovered disease of cattle. Mr. Lingard has also been occupied with a series of observations on the pathological histology of inflammation in the skin of fishes. Mr. Makins has also devoted much time to a series of histological researches on the bacillus of glanders, which have brought to light some interesting facts which will be published in due course. Dr. Klein has during the year 1882 been carrying on an independent series of researches on the influence of varied conditions on the form and attributes of the bacillus of splenic fever. These observations have conclusively shown that the form of the bacillus anthracis may under certain conditions undergo so unexpectedly great a change as to necessitate a fundamental modification of the views which are at present held regarding the permanence and characteristics of those forms of life which are the cause of such diseases as splenic fever, recurrent fever, leprosy, and very probably phthisis."

PAINLESS SLAUGHTERING.—A deputation from the London Model Abattoir Society on Wednesday waited upon the Markets Committee of the Corporation, in support of a request for a site in the Islington Cattle Market whereon to erect a model slaughterhouse on improved principles. The Markets Committee promised to take the request into their attentive consideration.

THE PLAGUE AND CHOLERA IN THE EAST.

As it is reported from Persia that an epidemic believed to be the plague has broken out in one or two of the holy places of the Hedjaz, interest of a very immediate kind attaches to the pamphlet which a well-known physician at Constantinople, Dr. Stékoulis, has just published with the object of showing the dangers attending upon these pilgrimages, and pointing out the best means of guarding against them. The pamphlet in question contains some new and interesting particulars with regard to Mecca and Medina, the sanitary condition of the pilgrims, the cholera epidemics at Mecca and their origin, and the precautions, such as they are, taken to prevent the spread of disease. So many travellers, however, have described the sites of these pilgrimages and the scenes enacted at Mecca and Medina during the sojourn of the pilgrims that there is no need to dwell upon this portion of Dr. Stékoulis's interesting pamphlet, but from a medical point of view much useful information is conveyed in the chapters devoted to the sanitary aspect of the pilgrimages. The pilgrims, numbering as a rule about a hundred thousand each year, and many of them in extreme poverty, reach their destination in a very fatigued condition. At the holy places they are crowded into a very small space and find the climate very different from that in which they generally live. The towns of Mecca and Medina are badly drained and very short of water, and the remains of the animals which have been slaughtered for sacrifice are allowed to decompose beneath a burning sun. In order to palliate the danger arising from all this, the International Sanitary Commission at Constantinople made arrangements some years ago for establishing a permanent service of inspection at Mecca, and things are not so bad as they were, though much still remains to be done.

Within the last fifty years there have been no fewer than sixteen epidemics at Mecca, the most severe being those of 1831, 1846 (15,000 deaths), and 1865 (18,000 deaths), and all save that of 1846 broke out while the pilgrimages were in progress. The latest epidemic was that of 1881, which broke out on the 16th of September among the Javanese, the Nubians, and the Bedouins. From them it extended to all the pilgrims who had reached Mecca and thence to Medina, Jeddah, Yambo, and the whole of the Hedjaz coast, the number of deaths being about 5000, or 5 per cent. of the total number of pilgrims. When the epidemic first broke out the measures which were available for meeting it were very insufficient, and though the Sanitary Commission despatched a medical mission from Constantinople, well provided with physic and other appliances, the disease had got such a long start that it was impossible to stamp it out. The pilgrims had carried it in every direction, and the most that could be done was to try to limit it to the Hedjaz. Everything coming by sea from the Hedjaz was, therefore, subjected to a double quarantine, the first of a fortnight's duration at El Wedj, upon the Egyptian frontier, 375 miles from Suez, and the second of two days at 'Djebel-el-Tor, 125 miles from Suez. These two points were, in the opinion of medical men who knew the country, very judiciously selected, as they are at a considerable distance from any town or thickly inhabited district, and yet are easy to supply with food from Suez. After passing through these two quarantines, the pilgrims who had to go through the Suez Canal were detained another ten days in the lazarets of Beyrout or Smyrna, as the case might be, while those bound through the Dardanelles were submitted to a medical inspection at Constantinople. In short, every pilgrim in good health had to go through a quarantine of thirty-five days, and those who had either been attacked or who had passed through an infected district were detained for at least 110 days. At the lazaret of El Wedj the inmates were left under canvas, and the pilgrims as they arrived were divided into sections according to the state of their health. The results achieved were, despite the occasional scarcity of water and the insubordinate conduct of the soldiers placed in charge of the station, very satisfactory, and it is generally considered that the precautions adopted by the medical body here prevented the epidemic spreading to the extent of the two previous ones. Dr. Stékoulis holds it as proved that the cholera germs are brought to Mecca by the fifteen or twenty thousand Mahometans who come from India, and one of the reasons upon which he bases this con-

clusion is that the four most severe outbreaks at Mecca and Medina have occurred in the same years when cholera has been so severe in India itself.

As cholera is a malady which follows the great tracks of humanity, the pilgrims serve to propagate it, and Dr. Stékoulis holds it indispensable that all pilgrims coming from the far East should be put through a quarantine in the Red Sea, and that a permanent hospital should be built upon the island of Camaran in place of the temporary one run up in the autumn of 1881. Dr. Stékoulis includes in his pamphlet the text of the regulations adopted by the Sanitary Council at Constantinople last year with regard to the arrival and return of the pilgrims. The first code contains ten clauses, the first of which provides that all vessels bringing pilgrims from beyond the Straits of Bab-el-Mandeb shall stop at the island of Camaran before touching at any other port on the Red Sea, and that all the passengers shall be landed for medical inspection. If there is no trace of any disease, the passengers will be detained for five days, and their clothes and the ship itself disinfected before resuming its voyage. If, upon the other hand, there is a single case of disease, the ship will be put into quarantine for not less than a fortnight. The vessels coming from Bassora with pilgrims for the Hedjaz will also be stopped for inspection in the island of Camaran, and they, like vessels generally from India, will be subject to the cholera regulations of 1867. The code of rules for the return of the pilgrims consists of nine clauses, the first of which provides that all vessels coming from the Red Sea will, besides being placed in quarantine in an Egyptian port, undergo a second quarantine in one of the following Turkish ports: Beyrout for Syria and Tripoli, Smyrna for Asia Minor and Turkey in Europe, and Bassora for the Persian Gulf. The quarantine will last ten days; but those vessels in which there has been any case of cholera will be detained for fifteen days, and will not be accorded a clean bill of health except with the express sanction of the Sanitary Council. Vessels from the Red Sea carrying pilgrims will, if they can produce a clean bill of health, be admitted without quarantine into all the Ottoman ports, upon condition of undergoing medical inspection. The eighth clause provides that upon land military cordons shall be established along the borders of the Desert, between Arabia, Mesopotamia, and in the neighbourhood of Damascus, for the caravans from Mecca and Medina. Dr. Stékoulis, in conclusion, urges that a regular agreement should be come to by all the States interested in this question, in order to ensure the due observance and, should it be found necessary to arrange for the extension of these rules.

STUDENTS AND THE MEDICAL BILL.

ON Saturday last, in the room of the Society of Arts, the members of the Medical Union Society held a discussion on the Medical Bill, presided over by Mr. Henry Power, F.R.C.S. Eng.

Dr. GLOVER, in opening the debate, said his wish was to hear what students had to say on a matter deeply affecting them. He would contract his observations so as only to start the discussion. He began with the question: Is there any case for legislation? which he answered by saying that three Governments had thought so, including both parties. The profession thought so. No less than twenty Bills had been brought into Parliament, besides three Government ones, between 1870 and 1881. The Medical Council itself thought so, with various degrees of conviction at different times. Lastly, the Royal Commission thought so. With such a consensus in favour of change, the present arrangements are discredited and cannot be perpetuated. The existing organisation of the profession might be described as a Medical Council in which nineteen bodies were represented, most of them individually; nineteen examining bodies, many granting more than one qualification; numerous medical schools. The Act of 1858 gave to the diplomas of all medical authorities, in whatever division of the kingdom, equal legal value as qualifications. Why alter the present arrangements? The very foundation of them was an honourable equality in the different but corresponding examinations. According to the report of the Commissioners there was great inequality. Then the diplomas were imperfect documents, only half diplomas. The students were harassed by multiplied corporations and examinations. The whole system was antiquated and unsatisfactory. The next question was what changes were desirable? First, a new Medical Council, less representative of interests, with the power of enforcing its regulations; secondly, a single licensing authority in each division of the kingdom, with security for equal examinations, equal cost and equal curricula; thirdly, more complete protection of medical titles against fraudulent or false use. Dr. Glover then described the changes actually proposed in the Bill, including a differently constituted Medical Council with direct representatives of the profession, and the representation no longer of individual bodies, but of divisional boards. The creation of Divisional Boards, Dr. Glover regarded as a valuable and interesting part of the Bill. Fourthly, the Bill defines the future title to registration; a person must prove competency in medicine, surgery, and midwifery, by passing, "with credit," a final examination such as is provided in the Act. Finally, the Bill provides stringently against the false use of titles. The Bill is creditable to the Government and deserves the support of the profession. He hoped the students would earnestly consider the subject and see their way to support the Bill. He regretted two things, the abandonment of the clauses in reference to higher titles, and the fact that under the Bill the new licentiate would have no title. This ought to be remedied.

The PRESIDENT endorsed the statements of Dr. Glover, that there was an immense difference at present in the standard of different bodies, and he was of opinion that this Bill should become law. On one occasion, in company with a fellow visitor (the day being August 12th), on arriving at the examination room he found the examiners were out shooting, and messages had to be sent here and there to find some one to come and examine the students awaiting their ordeal. At another time, at the anatomical portion of the examination, an old dry limb all plastered over with wax and paint was presented to test the knowledge of the students. The veins were coloured blue; the arteries were filled with red pigment; the lymphatics were painted yellow. He had, of course, to report inefficiency. Again, he had found that on certain occasions questions were given haphazard at the moment of arrival. Replies were required in half an hour to the questions jotted down in that cursory manner, and then the examiner, during the *viva voce* examination, glanced over the written papers and passed the candidates. This necessitated his unfavourable report. In other instances the sifting was superb in comparison with the above; the examination was systematic, thorough, orderly, and careful. In particular, he could speak of the Queen's University of Ireland. Never had he seen more satisfactory work done, especially in anatomy. So that it was very unfair that candidates receiving diplomas from such a Board should be pitted against men who had done nothing, or had passed a mere sham ordeal. He was sure the meeting would accord to Dr. Glover their heartiest thanks for his admirable and thoughtful address.

Mr. WADE considered this was a special occasion since it had brought before them a measure in which they were especially interested. He would ask his fellow members to listen to his statement, and would ask their endorsement of his proposition. He then read a resolution that had been drawn up in accordance with the views of many members of that society. He approved of Dr. Glover's views that the two great features for the future were:—(1) Equality of examination, and (2) an improved governing body. It was most unfortunate that the profession should have governing them a body of such elastic nature as the one in Oxford-street. The Council never showed force of character. He approved of the concentration of representatives. Nineteen of the twenty-four representatives at present were members of corporations, and only six were Crown members and independent. But there was one weakness in the chairman's remarks—viz., that the new examinations would improve the social position of the profession. At their last meeting it was moved: "That this society agrees, individually and collectively, that they must look for elevation of the profession in the future not to the elevation of standard of examination, but to a higher standard of preliminary education." At the present time there were eighty-four different preliminary examinations accepted; and he believed that two only were to be removed in the new list, leaving eight-two. These embraced boards existing in Scotland, Ireland, Ceylon, and India. With such a large number of boards hailing from such remote quarters of the globe, it is impossible for uniformity of

standard to exist. Until they could alter this and ensure a good general education prior to entering the medical profession, the latter could not command the desired position or status. It would be a great boon to have one examination requisite, and one only, as this Bill would provide. But the omission of the clause empowering successful candidates to register the title "Licentiate in Medicine, Surgery, and Midwifery," was very disappointing. The following petition in favour of the new Medical Bill, he proposed, should be sent to the Commons :—

"*To the Honorable the Commons of the United Kingdom in Parliament Assembled:—*

"This petition of the Medical Union Society of London humbly sheweth that your petitioners are engaged in the study of medicine in the metropolis. Your petitioners beg to complain of great inconvenience and injustice in the present division of the authorities for licensing to practise the different parts of medicine. They complain that the diplomas now given are costly, that they are only half diplomas, and that those given in different divisions of the kingdom are of very unequal value. Your petitioners would therefore pray your Honorable House to pass the Bill for amending the Medical Acts now before you, with one modification. Your petitioners pray you to enact that when a student shall have passed 'with credit' the new examination, to be established by the Divisional Board, under the double sanction of the Medical Council and the Privy Council, he shall be entitled to be registered as a Licentiate of the Medical Council in Medicine, Surgery, and Midwifery; or that in lieu of right to register such title he be exempted from the final examination of the corporations for their lowest diploma. And your petitioners will ever pray."

Mr. SLATER, of Guy's, seconded the adoption of the petition. He said the services of the corporations in the past were not good reason for compelling men to go to them in all future time. He thought it absurd that there should be no titular recognition of the new licence.

Mr. RICHMOND would have preferred provision for examination in Anatomy and Physiology, as well as in Clinical subjects. He also insisted on the importance of high preliminary examinations. He was anxious to know what was likely to be done in regard to unqualified assistants.

Dr. DANFORD THOMAS, Coroner, spoke very strongly in support of the Bill, and of the importance of the preliminary examinations being duly controlled by the Council. He expressed deep dissatisfaction with the present complicated and piecemeal system of examining bodies. It had a bad effect on students to require them to choose between nineteen examinations of all degrees of stringency in all divisions of the kingdom.

The discussion was continued by Messrs. Blakiston, Richards, Blakeman, and others, and in the end the petition was unanimously and heartily adopted.

THE MEDICAL PROFESSION AND FRIENDLY SOCIETIES.

A LARGE and influential meeting of the medical practitioners of Plymouth, Devonport, Stonehouse, and neighbourhood was held at Plymouth on May 3rd, 1883, to consider what course should be adopted towards the Three Towns Branch of the Friendly Societies' Medical Alliance, recently started in Plymouth and Devonport on a low system of fees, the vaccination being, previous to the meeting, done for nothing by its medical officers, and women and children admitted as members, thereby unfairly competing with, and injuriously affecting, the regular practitioners.

The following resolutions were passed with only one dissenting vote :—

1. "That the principles of the Three Towns Friendly Societies' Medical Alliance being contrary to the just interests of the medical profession, be it resolved that the medical profession of the Three Towns and neighbourhood decline to act in concert with the medical officers of the friendly societies aforesaid."

2. "That this meeting pledges itself to refuse to act in concert with any medical man acting in opposition to the plain meaning of the foregoing resolution."

3. "That this meeting pledges itself to make known the advantages of existing public provident dispensaries, the working of which being watched over by an investigation committee having special regard to the amount of earnings as qualifying for membership, are not injurious to the interests of medical men."

It was stated at the meeting that at Exeter, where the Alliance has a branch, it was estimated that the medical practitioners lost from £1500 to £2000 a year, and that one practitioner lost £500 the first year the Friendly Societies' Medical Alliance was started in that town. The inaugural speech of the President of the Alliance delivered at Exeter at their annual meeting was quoted to the following effect :—"The medical profession had offered a great deal of opposition to the establishment of these societies. In Exeter they had suffered considerably owing to the indirect influence of medical men; the Exeter association had been involved in legal proceedings, which were, no doubt, intended to destroy it; in fact, when it was originally established he (the President) was threatened that whenever they brought a new medical man into the city the profession would blackball him. The aggregate income of the forty-two associations in 1882 was about £24,000; and nearly £13,000 was spent in the shape of salaries to the medical men employed." It was pertinently pointed out that it appeared from the last statement of the President that more than £11,000, or nearly half the income, was not spent in the shape of salaries to the medical men employed, though this was professedly purely a medical alliance.

WILLS OF MEDICAL MEN.

THE will of Mr. Frederick Justus Toulmin, F.R.C.S., of 36, Thurloe-square, Brompton, who died on February 4th last, has been proved by Mr. Arthur Henry Lancaster and Mr. Francis Stockdale Toulmin, the nephew, the executors, the value of the personal estate amounting to upwards of £62,000. The testator bequeaths £200 to the Royal Medical Benevolent College at Epsom for the relief of medical men, their widows and orphans; and numerous legacies to his sister, brothers, nephews, nieces, and others of his own and also of his late wife's relatives, and to his executors and others. The residue of his property is to be divided between his brother Francis Toulmin and his said brother's son William Calvert Toulmin.

The will of Dr. Alexander Chesney Young, of 5, Whitehall-place, was proved on the 6th ult. by Mr. James Young Stephen and Mr. Oscar Leslie Stephen, the nephews, the executors. The testator leaves one-half of his property to his brother-in-law, Mr. Oscar Leslie Stephen; and the remaining half upon trust for the widow of his brother James for life, and then to Alexander Condie Stephen.

The will of Dr. Drewry Ottley, late of 93, Ladbroke-grove, Notting-hill, who died in December 31st last, has been proved by Mrs. Anna Waldron Ottley, the widow, the personal estate exceeding £450. The testator, after giving legacies to his children, leaves the remainder of his property to his wife for life, and after her death to be equally divided between his six children.

The will and codicil of Mr. Thomas Harvey Lowry, of West Malling Place, Kent, who died on March 8th last, were proved on the 14th ult. by Mrs. Elizabeth Jane Lowry, the widow, Mr. Henry Syme Redpath, and Dr. J. J. Douglas Burns, the executors, the value of the personal estate amounting to over £5700. The testator gives legacies to his wife, children, and executors, including two freehold houses at Maidstone to his eldest son; and the residue of his property, real and personal, he leaves upon trust for his wife for life, and then to his sons Thomas Harvey and James, and his daughters Mary and Minnie.

MEATH HOSPITAL, DUBLIN.—The following gentlemen obtained prizes at the termination of the winter session :—First Medical Prize: William Waterfield. Second Medical Prize: C. J. King. First Senior Surgical Prize: S. Hickson. Second Senior Surgical Prize: W. H. B. Robinson. Additional Prize: J. A. Johns. Junior Surgical Prize: G. E. Greene. Second Prize: J. M. Day and R. R. Leeper, equal.

Correspondence.

"Audi alteram partem."

"HOSPITAL ADMINISTRATION."

To the Editor of THE LANCET.

SIR,—I regret that you have recently deemed it necessary to criticise the position of the London Hospital, and to censure the system adopted in raising money to maintain it. The sum which we require is so large, partly from our exceptional position, which has no parallel anywhere, and partly because in dealing with requirements of such magnitude it is found easier and more acceptable to all that an effort to meet our wants should be made occasionally rather than continuously. Hitherto it has been a short, sharp, and successful struggle in a cause which every man is conscious demands his utmost efforts, and deserves them. Hence the decision to call upon the friends of the hospital for that aid, which no mere local efforts can attain, once only in every five years. And in adopting this course the committee are not, as you suggest, "incurring a debt which at present amounts in five years to half the income of the whole of the metropolitan general hospitals, and which will exceed their total income, if the present system of financing the London Hospital is continued for ten years longer." On the contrary, they are working to provide an income which shall keep them free from debt for five years from the present time, as their last effort has actually kept them free for the five years now gone by, and this without encroachment on the funded and invested property of the hospital, which, though small, is, after allowing for all outstanding obligations, rather larger than it was five years ago. So much in explanation of our so-called debt, which is by you regarded as a disease, but which represents, in fact, vitality of no mean order.

Now, as to the remedy for our deficient income. Such remedy, you virtually assert, would have been already in operation if a provident dispensary had been founded in the East-end five years ago, and you support your assertion by quoting the increase of our patients during the period in question, involving, of course, a corresponding increase of expenditure.

This annual increase of numbers has amounted to 658 in-patients and 19,700 out-patients, the latter mainly of the minor casualty or one-attendance class. The cost of the 658 in-patients is about £4875 and of the out-patients £647 per annum. Of the former item the provident dispensary could not have relieved us of one penny, because it could not have relieved us of one patient. To the extent, we will assume, of £647 per annum, presuming the additional out-patients could have been all treated at a provident dispensary, our funds would probably have been relieved. Valuable, however, as every contribution must be deemed, it is clear that this saving would not have gone far to neutralise the alleged deficiency of £150,000.

Let me not be mistaken as to the value we attach to the work of duly recognised provident dispensaries. The London Hospital would welcome their establishment. It is hoped that they will soon be seen commencing work, and all really suitable cases will be, whenever practicable, referred to them for treatment. Neither have the authorities of this hospital neglected the resources of the surrounding district. The people's fund, a purely local effort, supported by a widely extended organisation, chiefly of the working classes, realises nearly £2000 a year, and no opportunity is lost of developing its resources. No method of "financing" (an expressive but to me unsavoury word) which depends on the contributions of the labouring classes alone can, however, suffice to maintain a hospital as distinguished from a dispensary. Its in-patient accommodation must still mainly be dependent on the contributions of the rich who give their aid with no view to any recompense whatever.

You taunt us with living mainly upon faith. To a certain extent we do. We believe that in the affairs of great institutions, as in those of individuals, good and honest work is not without its fitting recompense. It is acknowledged that the London Hospital strives to fill what, in its absence, would be (in a charitable sense) the great desolate void of the East-end; and its managers believe that so long as the need for a public hospital in this locality remains as urgent as at present, so long will it be adequately supported. Whenever the time may arrive which shall bring with it indications that this institution can be dispensed with, I doubt not the then authorities will at once "accept the inevitable" and retire—

> "They will fold their tents like the Arabs,
> And, as silently, steal away."

Personally, however, I have a conviction that the day when the London Hospital will be required or allowed to cease from its labours is still in the far distance.

I am, Sir, your obedient servant.

WM. J. NIXON, House Governor.

London Hospital, Whitechapel-road, E., May 1st, 1883.

CURIOUS CASE OF VEGETABLE POISONING.

To the Editor of THE LANCET.

SIR,—At 10 P.M. on April 11th my assistant was called to W. R——, aged thirty. The patient was seated on a bench in his workshop with closed eyes, and apparently he was quite indifferent to all surroundings. All efforts to rouse him were unavailing, either to make him speak or in any way to answer questions. When left to himself he exhibited a slight occasional jerk of the limbs, especially of his arms. At times he made sudden thrusts into the air, as though attempting to catch flies. The pulse was rather weak, and the breathing quiet and regular; tongue moist. He obstinately prevented an examination of the pupils, and even when held by three men successfully resisted every effort to make him swallow a draught. After a cold douche to the head he talked irrationally, but soon became quiet again on being left undisturbed. There being no indication of danger, he was left in charge of his friends, after a continuous watching of nearly three hours. He was taken home in a cab about 2 A.M. of April 12th. He had no illusions of vision whilst travelling the two miles, but on getting into his warm bedroom, he subsequently stated, he distinctly saw some one lying in his bed. At 7 A.M. of the 12th he came as usual to his workshop, when, he averred, he noticed some women sitting in his way, and that they vanished when he proceeded to turn them out. At 5 P.M. of the same day he presented himself at my surgery, and only complained of feeling "nervous," and rather sore from the rough handling of the preceding night. My assistant was informed that four hours previous to his visit on April 11th the patient had taken nearly a pint of stinging nettle "tea" made from about half an ounce of the dried herb. He had taken similar doses twice a week for some months past without any ill effects. On this last occasion a fellow workman had swallowed about a wineglassful from the said pint of "tea," and an hour and a half afterwards he also complained of dizziness and double vision, which symptoms, however, entirely disappeared after the operation of an emetic. The illusions of vision in this case came on soon after swallowing the "tea." They consisted in his seeing three or four objects where one only was present; he also saw frogs and other things crawling about, and his chief desire and endeavours were to catch them. Everything appeared green to him.

The bundle of herbs which was said to have been infused has been very carefully examined both by myself and by others, and only specimens of the common nettle (Urtica dioica) and of U. urens could be detected amongst the stems and leaves. These urticaceæ are chiefly and popularly known from their venomous sting when applied externally. The effects of some of the foreign species of the genus are recorded as dangerous. Lindley quotes M. Leschenault ("Mém. Mus.," vi., 362) as describing the serious effects upon himself and a workman of gathering U. crenulata in the Botanic Garden at Calcutta, and the less violent effects of another dangerous species (U. stimulans) he found in Java. Lindley concludes: "Both these seem to be surpassed in virulence by a nettle called Daoun setan, or devil's leaf, in Timor, the effects of which are said by the natives to last for a year, and even to cause death."[1] I can find no recorded evidence of any species, British or foreign, of the genus urtica, when taken internally, producing poisonous symptoms. I have procured of the herbalist from whom the dried herbs were bought a further supply, which he assured me he took from the same

[1] Introduction to the Natural System of Botany, 1830, p. 93-4.

bundle whence came the former specimen he had sold to W. R——. On carefully examining this specimen I myself obtained, we found mixed with the nettle several broken leaves and a few undeveloped flowers of another plant, evidently the small capitula of one of the Compositæ. The material secured has, however, been insufficient for absolute identification of the plant; but we have made out that in all probability the leaves and capitula belong to a species of Compositæ closely allied to an Artemisia. Neither Christison, Taylor, nor Guy and Ferrier in their respective works name either of the Artemisiæ as amongst the vegetable poisons. Woodman and Tidy[2] class the Artemisia absinthium with the poisonous Compositæ, but only to refer to, and quote a case of, poisoning by the oil of wormwood, which oil they call a narcotico-acrid. The other poisonous Compositæ (Caltha palustris, marsh marigold, and the ordinary Lactuca sativa, and the strong-scented lettuce, virosa) which these authors cite, respectively produce, however, very different symptoms from those observed in the patient. The fact that "everything appeared green to him" would point to the Artemisia santonica (the source of santonine) as probably forming part of the infusion of the dried herbs the patient had swallowed. The literature I have been able to refer to appears absolutely silent on the other poisonous qualities of this plant. Pereira,[3] in speaking of its physiological effects and uses, cautiously says: "An accurate account of the effects of santonica is yet wanting."—Yours truly,

Bishopsgate, May 5th, 1883. ROBERT FOWLER, M.D.

ANTISEPTIC INHALATION IN PHTHISIS.

To the Editor of THE LANCET.

SIR,—It is probable that Dr. Hassall's absence from England has prevented him from making himself acquainted with the results of recent experiments in regard to the subject of inhalation. I endeavoured to point out in a communication to the British Medical Association, at the meeting at Bath, the fact that the vapourising or volatilising of the essential oils, the phenol compounds, and similar substances, is only effected by vapourising the water with which they are mixed. Dr. Hassall seems to imagine that the method he criticises has always been employed; such, however, is by no means the case, and he is rather late in his discovery that very little, if any, benefit comes from using inhalation as he supposes. Since the Bath meeting I have repeatedly sent communications on this subject, and gradually a little common sense is being brought to bear upon a very useful method of treatment when properly and scientifically conducted. The only danger is that too much will be expected of it, and its use exaggerated.

I am, Sir, yours truly,

May 6th, 1883. ROBERT LEE.

A VOLUNTEER MEDICAL RESERVE.

To the Editor of THE LANCET.

SIR,—It is suggested that the volunteer medical service should be strengthened by the formation of a Volunteer Medical Department and the consequent organisation of a Volunteer Hospital Corps. Such a proposition is now before the public, and bears the support of most of the volunteer medical officers. In addition to this distinct advance in the volunteer equipment, I would suggest that the Government should organise a reserve of medical officers as in the other branches of the army, which reserve would be available for home district and hospital work in case any foreign war caused a large drain on the present medical department. Such a reserve would cost nothing to Government, would be popular amongst us, and would identify us more closely with the regular medical officers. That we should gladly avail ourselves of such commissions, the experience of the late Turco-Russian war sufficiently proves, if we remember that nearly all of us volunteered to relieve the Army Medical Department of their home duties on an appeal from the Government when the pressure of imminent war threatened to withdraw the regular army medical officers for foreign service. I am, Sir, yours truly,

M. BAINES, M.D.,
Surgeon-Major, 1st Middlesex Engineer Volunteers.
Head Quarters, College-street, Chelsea, S.W., May, 1883.

[2] Handy Book on Forensic Medicine and Toxicology, p. 286.
[3] Manual of Materia Medica and Therapeutics, 1865, p. 334.

THE NORTH-WEST LONDON HOSPITAL.

To the Editor of THE LANCET.

SIR,—Referring to your able article on the proposed new hospital for North London in last week's issue, I notice there is no mention of the North-West London Hosptial in the list of those institutions which are named as ministering "most valuably to the wants of the people of this district." I enclose a copy of our last report, which shows that last year 220 in-patients were admitted, and 12,953 cases (patients of both sexes) were treated in the out-patients' department. The new wing, to be opened by Her Royal Highness Princess Christian in June, will extend the accommodation to fifty beds, thirty of which will be available for adults of both sexes.

I remain, Sir, yours obediently,

ALFRED CRASKE, Secretary.

North-West London Hospital, Kentish Town-road,
May 9th, 1883.

SCOTLAND AND THE BILL.

(From a Scottish Correspondent.)

THE gyratory efforts of the various parties in Scotland, each around its little centre of individual interest, are amusing enough to outsiders and to politicians who can take a broad view of an imperial question. Both at home and in the precincts of Parliament there have been loud crying, earnest entreaty, and some success in the effort to set small interests against the general weal; but it may be with some confidence hoped that these petty intrigues will have little further effect, and that the Bill may be permitted to pass into law without further concessions to those eternal "interests" whose very existence should in some cases be looked upon as a disgrace. The united efforts of the universities and corporations have been enough to deprive those who pass the proposed State-imposed examination of a recognised title in the Register, and this with a few other "sops" on money questions have been sufficient to divert opposition from the principle of the measure to the lesser question of who will have chief influence in the reconstituted condition of things. The fight in Scotland now resembles that among the Kilkenny cats, and it may be regretted by outsiders that the result cannot also be similar. However, there is no chance of this, and it behoves well-wishers of the profession and the public to favour the party who, judging from the past, seem most likely to promote the higher medical teaching and the supply of thoroughly trained practitioners. It is not probable that the corporations in Scotland will be content with the discussion which took place on report in the House of Lords regarding their share in the election of the divisional board, or the refusal of the Medical Council to interfere on their behalf; but in the light of Lord Carlingford's remarks, as well as those of other noble lords, discretion might prove the better part of valour, and these bodies would be saved from the hard hits to which the report of the Commission leaves them so exposed. With the paramount influence over the divisional boards which the Council will exercise, it does not appear that the Scotch corporations have any reason to fear the action of the majority in their local board; and, judging from the tone of the statement recently published by the universities, there is no wish in that quarter to injure their weaker brethren. In the petitions to Parliament prepared by the various corporations, whether represented by their councils or by the same gentlemen in their capacity as extra-mural lecturers, the strongest exception is taken to the constitution of the Scottish board on the ground that they are not sufficiently represented; and many friends of the universities will admit that a proportion of eight to three gives them an undue preponderance of votes. It is when other schemes are suggested that the wisdom of the present arrangement becomes evident. Take, for example, the silly proposal put into the hands of Lord Galloway. It is inconceivable that anyone acquainted with the current of medical opinion, or the position of matters exposed by the recent Commission, could honestly seek to give the Glasgow Faculty the position suggested on its behalf. The whole effort of that body will be needed to prevent its extinction, and now that both Apothecaries' Societies are disposed of, even its bare life might well be refused. Indeed, on every hand the difficulties seem increased when attempts are made to settle the constitution of the board on new lines, and

the only alternative which appears reasonable would be the entire suppression of St. Andrews and the Glasgow Faculty, giving their members to the Edinburgh corporations; or, if that would give the Scotch metropolis a too great share of representation, handing over the choice of these members to the profession. The fact that the corporations in Scotland gravely put forward the numbers they have admitted to the profession as a claim for better treatment shows a temerity which might be most useful in a better cause.

SCOTTISH NOTES.

(From our own Correspondent.)

MR. J. GREIG SMITH, of Bristol, has resigned his position as examiner in surgery and midwifery at Aberdeen, an office which he has held for two years.

NEW HOSPITAL FOR INCURABLES.

The beautiful suburban property recently purchased by the directors of the Incurable Hospital at Perth has now been thoroughly rearranged; the house has been enlarged and made in every way fit for its new purposes, and was opened as the Hillside Home last week. The lugubrious word "incurable" has been dropped, and in future the "Home" will be used for convalescents as well as by those for whom it was originally intended. This is a very wise resolution, and might fitly be followed by like institutions throughout the country. This new venture has been opened free of debt, and with a reserve capital of £2000. Much of this vitality is due to Dr. Stirling, who has sole charge of the concern.

DESTITUTION IN THE WEST OF SCOTLAND.

Further details, now published at the instance of the Board of Supervision, go to prove that the destitution throughout the West of Scotland, though real enough, has by no means reached the stage of starvation. The calamities of last year, so far as they were meteorological, are, of course, irremediable, but chronic causes are found to exist which must be boldly faced if successive periods of want are not to be accepted as normal. More easy disposal for the harvest of the sea, so little wrought in those lonely regions, is much desiderated; and if the miserable holdings are still to provide the chief sustenance for the people, emigration seems the only permanent remedy. Meantime, much is being done by the various committees; seed corn and potatoes are being provided by the landlords and the charitable throughout the country, and the crisis is almost over. Several cases of typhoid fever have recently occurred in Skye, to intensify the distress there.

THE EAST COAST DISASTER FUND.

The first annual statement by the committee entrusted with the administration of this fund, raised for the relief of sufferers by the calamity of October, 1881, is now published. The total subscriptions till date amount to £53,367; the amount expended during the past year is £7870; while the number of recipients on the roll is as follows: widows, 104; children, 328; dependents, 55—total, 487. Altogether this fund is a splendid testimony to the generosity of Scotchmen, and will form a permanent means of relief in distressful circumstances similar to those in which it originated.

THE MEDICAL BILL.

Dr. Heron Watson's bold claim on the part of the corporation for a majority of members in the proposed divisional board is almost as amusing as Dr. Haldane's appeal to the numbers passed by the Edinburgh licensing bodies as a reason for their increased representation. Many of us in Scotland deprecate the hard words used towards the venerable institutions so faithfully served by these gentlemen, while recognising the new condition of things which has left them such diminished influence and position; but when placed against the universities in the spirit which animates the speech, more especially o Dr. Watson, it is time they know that even in Scotland their interests are not supposed to coincide with the best aspirations in the profession. The time was when medical education in Scotland had but the Royal Colleges to look to for encouragement; but Parliament proposes to legislate in view of the circumstances of to-day, and, let Dr. Watson remember, on the lines of the Royal Commissioners' recommendation. The glamour of numbers need not be attempted after all that has been written on the subject. No one disputes the enormous extent to which this supposed harbour of refuge has been used; what one wonders at is the spectacle of eminent men pointing to a proved weakness as something to boast of. It is, perhaps, unfortunate that no reply was attempted in the Medical Council; but beyond the general question of advisability, it should be remembered that Professor Turner, to whom the duty would most fitly have fallen, is at the present moment President of the College of Surgeons as well as representative of two universities. There is no risk to the Edinburgh Colleges that their disfranchisement will come—no one anticipates such slaughter; but since the Apothecaries' Societies have been left out, there is, perhaps, a majority of medical men in Scotland who would vote for the suppression of the other corporations. This feeling has been intensified by the ridiculous proposal to give the Faculty of Physicians and Surgeons of Glasgow two delegates. Whatever view may be held on these details, the complete supremacy of the universities on the Scottish divisional board is looked upon as a *sine quâ non*, and this in the public interest no less than as a guarantee for higher medical teaching.

IRELAND.

(From our own Correspondent.)

ROYAL COLLEGE OF SURGEONS.

THE annual elections for examiners took place on Tuesday, the 1st inst. There were seventeen candidates for nine examinerships for Letters Testimonial and Fellowship. Of these, all the outgoing examiners were re-elected with the exception of Mr. Swanzy, who was replaced by Mr. A. H. Benson, and Mr. Henry Gray Croly, who was elected to the vacancy occasioned by the death of Mr. R. Wills Richardson. No change took place in the examiners in midwifery, while in the examiners in general education, Mr. R. Morton was substituted for Mr. Malone. Mr. Croly having resigned his seat on the Council, an election was held on the 5th inst. to appoint his successor. There were four candidates, Messrs. Baker, Coppinger, Kidd, and Stoker, the last-named being elected by a majority of votes. At this meeting of the Fellows Mr. Rawdon Macnamara proposed a resolution in reference to the loss the College had sustained by the death of Mr. R. Wills Richardson, late chairman of the Board of Examiners. It stated that it was the unanimous feeling of the Council and examiners that the deceased had performed his duties in an impartial and fair manner, and which was only equalled by the intimate and accurate knowledge of the subjects on which he examined, and begged to condole with Mrs. Richardson and her family in their bereavement. Mr. William Stoker, sen., seconded the resolution, which was adopted.

On the 4th of June the annual elections for president, vice-president, secretary, and council will take place. Mr. Wheeler will succeed Mr. Barton as president, and will be replaced in the vice-presidency by Mr. Edward H. Bennett, Professor of Surgery in the Medical School of the University of Dublin. As regards the council, there will no doubt be many aspirants to the office, but few, if any, changes can be anticipated.

DEATH OF DR. WILLIAM STEELE.

Dr. Steele, registrar of the Irish Branch of the General Medical Council, died at his residence in Bray, county Wicklow, on Sunday last, aged sixty-six. Deceased also held the post of Director of the Science and Art Museum in Dublin. Dr. Steele was a Doctor in Medicine of the University of Dublin, and a Fellow of the College of Physicians in Ireland.

The late Dr. Richard Tushill Reid, who was educated at Trinity College, Dublin, has left some £25,000 for the encouragement of education in Ireland. He also bequeathed a sum of £7000 to Trinity College for the purpose of founding a professorship of penal legislation, including principles of prevention and reformation. A further sum of £6000 is left to the College for the founding of five exhibitions for students of limited means from Kerry.

Out of 126 candidates who entered last month for the examinations for the first half of the diploma in Surgery of the Royal College of Surgeons no less than fifty-one were rejected.

BELFAST.

(From an occasional Correspondent.)

THE classes have re-opened at Queen's College, and clinical teaching has commenced again at the Royal Hospital. There were about 295 medical students in attendance at the College during the past winter session. At the Royal Hospital there were 225 students on the roll during the past session, and at its termination the Coulter Exhibition (for proficiency in medicine and surgery) was awarded to Mr. Brownlee. At the beginning of the summer session, four resident pupils (i.e., senior medical students who live in the hospital and look after the patients under the direction of the house-physician and house-surgeon) are appointed by competitive examination. Two of these enter on duty at once, the other two at a subsequent period. At the examination recently held fourteen gentlemen presented themselves, a larger number than ever came forward before. The board of management of the hospital have, for some time past, been making most strenuous efforts to get the working classes of the town to take an interest in the charity. They have sent deputations to many of the large mills to urge the claims of the institution, and as a result, it is very gratifying to find that the *employés* of many of the leading firms have responded to the appeal, and have agreed to subscribe to the funds of the hospital. In return, the board offer special advantages to the workpeople of those establishments who have joined in this movement.

Some time ago a very successful amateur concert was held in the Ulster Hall in aid of the fund for painting the interior of the Belfast Hospital for Sick Children, and, as a result, the handsome sum of £118 was realised for the benefit of this most popular institution. At present the hospital is being painted, and consequently there are no intern patients, but the out-patient department remains open as usual; and it is expected that in the course of another month the wards will again be ready for the reception of children.

The senate of the New Royal University of Ireland require students who come up for the M.B. examination to present a certificate of having attended a course of lectures in mental diseases. As a result of this arrangement, Dr. Merrick (the superintendent of the asylum in this town) has been giving an excellent course of lectures, which have been greatly appreciated by the students who attend. At the close of the recent course of lectures the prize was awarded to Mr. Carter.

The annual meeting of the North of Ireland Branch of the British Medical Association will be held next month in Belfast. It is expected there will be a large attendance of members, as part of the business will be to nominate a president for the annual meeting of the British Medical Association of 1884, which is likely to meet in Belfast. It is expected that Dr. Cuming will be unanimously selected by his professional brethren in the North of Ireland for this onerous post. He is Professor of Medicine in Queen's College, and one of the physicians of the Royal Hospital; and in addition to his recognised professional attainments, he is a man of great breadth of view and high literary culture.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AT the ordinary meeting of the Council on Thursday last the President reported that the Medical Act Amendment Bill (1883) had passed through its several stages in the House of Lords, and the Council adopted, *nem. con.*, the following resolution:—"That the Medical Act Amendment Bill (1883), as modified and introduced into the House of Commons, meets with the approval of this Council."

Dr. Robert Barnes, of Harley-street, admitted a member in 1842, was elected a Fellow.

The annual meeting of the Fellows of the College for the election of Members of the Council was fixed for Thursday, the 5th July.

Mr. Cadge gave notice of the following motion at the next meeting of the Council:—"That it is expedient that at the election of members of the Council the Fellows shall be allowed to vote, either in person or by proxy."

MEDICAL NOTES IN PARLIAMENT.

The Royal University of Ireland.

IN the House of Lords, on Thursday, Lord O'Hagan moved the second reading of a Bill to enable the Royal University of Ireland to be represented on the Medical Council. Lord Carlingford expressed his approval, and the motion for the second reading was agreed to.

The Contagious Diseases Acts.

Lord Oranmore and Browne strongly protested against the withdrawal of the police employed in carrying out these Acts. Lord Northbrook replied that, after the adverse vote of the House of Commons, the Government could not expect that House to vote the money for continuing the system of compulsory examination. The Duke of Cambridge expressed his opinion that the benefit resulting from the Acts had been enormous, and that the localities affected by them would be the last to wish for their repeal. He begged their lordships not to allow the Acts to be swept away. The Lord Chancellor briefly defended the action of the Government, and the subject dropped.

Petitions.

In the House of Commons on Thursday, the 3rd inst., a petition in favour of the Infectious Diseases Notification Bill was presented from Brentford, and one against from the Thames Valley district. Petitions in favour of the Medical Act Amendment Bill came from Carlisle, Thames Valley district, and the Isle of Wight. On Monday a petition from the British Medical Association was presented against the Infectious Diseases Notification Bill. A petition was presented from Twickenham for alteration of the Public Health Act, 1875. On Tuesday a petition was presented from the British Medical Association in favour of the Medical Act Amendment Bill.

The second reading of the Public Health Acts Amendment Bill was deferred to the 22nd inst. Provisional Order Bills were brought in for the improvement of unhealthy areas at St. George's-in-the-East, Limehouse, and Lambeth.

On Wednesday, a petition in favour of the Medical Act Amendment Bill was received from Cardiff, and one from Edinburgh for alteration of the Bill.

Notices.

Colonel Alexander gave notice to ask whether the officers of the Army Hospital Corps are now receiving lower rates of pay than any other departmental officers in the Army; and, if so, why.

Mr. Corbet gave notice of further questions as to the removal from Scotland to Ireland of a dangerous lunatic named Flannagan, who on being sent home murdered his father. The hon. gentleman proposes to ask the Lord Advocate to suggest to the Scotch Lunacy Board to communicate with the Irish Lunacy Board on all cases of the removal to Ireland of pauper lunatics, so that proper arrangements for their reception in an asylum may be made.

Fever in Dublin.

Mr. Trevelyan, replying to Mr. Corbet on Friday, stated that the medical inspector had sent in his report upon the recent outbreak of typhus fever in Jones's Court, Dublin. It went to show that, while it was to be regretted that the dispensary doctor (who was a newly appointed officer, and not familiar with all the provisions of the Public Health Act) did not promptly report the nature of Roe's illness to the officer of the Corporation, who might have taken steps to prevent the holding of a wake, yet there is no reason to think that he was guilty of any wilful neglect of duty; and, as has already been stated, the weight of evidence goes to show that the fever was not spread by the wake, but by concealment on the part of those families in which the disease first appeared. There does not appear to be any way in which the Government can further interfere usefully in the matter.

Quarantine Regulations.

Mr. Ashley, in reply to Sir J. Lubbock, stated that the Quarantine Board of British Guiana recently altered their regulations in order to prevent being landed a cargo of rice from a ship infected with cholera. The alteration was in the nature of an indefinite renewal of quarantine, and the Secretary of State had expressed an opinion that it would have been better to have taken power to prohibit in direct terms the landing of the cargo. The governor had been requested to forward the medical evidence upon which he acted.

The Contagious Diseases Acts.

In reply to a number of questions on this subject, Lord Hartington, on Friday, stated the provisions of the Bill which the Government propose to bring in to amend the Contagious Diseases Acts in conformity with the resolution recently passed on the motion of Mr. Stansfeld. His lordship added that, whilst the services of the metropolitan police officers who had been engaged in the protected towns would now be dispensed with, the visiting surgeons would be for the present retained for the purpose of providing legal means of admitting women to certified lock hospitals. It was true that the Dublin military authorities desired the extension of the Acts to that city, and that being now inexpedient, arrangements had been made for providing increased accommodation for diseased women at the Westmoreland Lock Hospital.

Further questions were put to the Secretary for War and the Home Secretary on Monday, and the adjournment of the House was moved by Mr. Pulcston, in order to express dissatisfaction with the course events had taken. A debate of some length followed, in which Dr. Farquharson observed that the supporters of the Acts had had a fair stand-up fight, and they had been beaten. He deprecated these irregular discussions, and thought they had better reserve their energies until the Government Bill was before them. This practical view was endorsed by the party leaders, and the subject was allowed to drop.

On Thursday it was revived by another batch of questions. Sir W. Harcourt said he had received a protest from Chatham against the withdrawal of the metropolitan police. The Government, however, were bound to carry out the decision of the House. A limited number of inspectors would remain on duty, to carry out the detention of women who voluntarily submitted themselves. Mr. Hopwood gave notice that he would oppose this.

On the motion of Mr. W. Fowler a return was ordered of the cost of visiting surgeons under the Contagious Diseases Act, and of their number; and return of the number of those, if any, who act both as visiting surgeons and inspectors of certified hospitals, with the amount of salary and emoluments they receive in respect of each of those appointments.

Cashel Dispensary.

In answer to Mr. Moore, Mr. Trevelyan said it was a fact that no appointment of a medical officer had yet been made to the Cashel Dispensary. The Local Government Board wrote to the Dispensary Committee last month expressing the hope that the necessary steps would be taken to fill up the vacancy. The committee met to consider the subject, and postponed the election till the 14th of July. The Irish Local Government Board had no power in this matter to override the decision of the committee.—Mr. Moore asked whether the House was to understand that in the meantime this district was to be without a medical officer, and that the Irish Local Government Board had no power to appoint a medical officer for the district by sealed orders if the guardians continued to postpone the election.—Mr. Trevelyan said he presumed such cases as this were very rare, and that possibly none had ever occurred before. He would assure the hon. gentleman that when the appointment was made the Local Government Board would consider very carefully indeed the qualifications of the candidates, with the view of ascertaining whether there was any connexion between the particular appointment and the delay that had taken place.—Mr. Moore gave notice to ask the Chief Secretary how long, in the opinion of the Irish Local Government Board, this large and important district was to be left without a medical officer, and whether he was aware that these continual delays had been made use of to qualify a candidate who was hitherto unqualified by age.

The Medical Act Amendment Bill.

The second reading of this Bill in the House of Commons will probably not be taken until some time after Whitsuntide. Meanwhile it has been "blocked" by Mr. Biggar, which will prevent its coming on after half-past twelve at night.

A CHESS tournament, in which the ordinary figures of the board were represented by non-commissioned officers and men of the Household Brigade, was played this week at the Cirque, Argyle-street, for the benefit of the funds of the Hospital for Children and Women, Waterloo-road, and the West-end Hospital for Nervous Diseases.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed the Primary Examination in Anatomy and Physiology at meetings of the Board of Examiners on Monday, Tuesday, and Wednesday last:—

William Nattress and William H. MacDonald, Toronto, Canada; W. J. Roalf-Cox, St. Thomas's Hospital; William L. Symes, Alfred H. Middleton, and George R. Cox, Dublin; Edward J. Sidebotham and Russell Coombe, Cambridge; F. C. G. Butler and H. J. M. Watts, St. Bartholomew's Hospital; William G. Moore, Charles Barlow, Heslop L. Pearson, and William Matthews, Liverpool; Alfred Moxon, Gilbert C. Hall, and Frank G. Gardner, Birmingham; Thomas C. Loman and Walter J. Hill, Bristol; John C. Holderness, Glasgow; Henry B. B. Greene, Belfast; Walter B. Nisbet, Edinburgh; Arthur S. Kendall, New York and Guy's Hospital; Caleb Schnehoge, Leeds; Osborne H. Reddall and A. M. Joly, University College; Charles G. Wallis and William M. Sheen, Guy's Hospital; Geo. T. Collingwood and John P. Taylor, London Hospital; Daniel L. Hubbard, King's College; Thomas E. Honey, St. Mary's Hospital; William F. Dewanap, St. George's Hospital; Edward L. Williams, Middlesex Hospital; Charles Pollard, Richard J. Reece, Alfred L. Cox, and Robert G. Cross, St. Bartholomew's Hospital; L. O. Lindridge, John W. Pugh, and Sidney R. Hodge, London Hospital; Ernest A. Thompson and S. C. G. Fox, Westminster Hospital; Horace J. Gould, Middlesex Hospital; Edwin A. Barton, University College; Lawrence Bidwell and John S. Grose, Guy's Hospital; W. M. A. Anderson and John F. Harris, King's College; Frank R. Bolton, Guy's Hospital and Manchester; F. C. W. Hounsell, Cambridge and St. Thomas's Hospital; Alex. White, St. George's Hospital.

UNIVERSITY OF GLASGOW.—At the recent medical examinations the following candidates passed:—

FIRST PROFESSIONAL EXAMINATION.

John Allan.
W. Carrick Allan.
John Baird.
Samuel J. Baird.
David Reid Barrie.
Charles W. Bell.
H. Duncan Brown.
Hugh D. Buchanan.
William Butchart, M.A.
Archibald T. Campbell.
Robert Corbett.
Alexander D. Crawford.
William C. Crichton.
Donald Currie.
William Davidson.
George W. Davis.
Josephus L. Downs.
William Findlay.
W. J. Gibbin.
Adam Hamilton.
Robert Hamilton.
Charles T. Harris.
James E. Hunter.
William Huntly, M.A.
William J. Keir.
George Marshall.
John Marshall.
Alfred E. Miller.
George Miller.
Alexander Munro.
Donald S. M'Call.
Ronald J. R. MacCrindle.
George G. M'Donald.
Hugh M. M'Houl.
Archibald M'Lachlan.
Alexander H. MacLean.
David T. M'Leod.
Charles Mactaggart.
Andrew H. Richmond
John Ritchie.
John Rowatt.
Pramath Roy (2).
Walter Sandeman.
William Shand.
John S. Stewart.
Robert Stirling.
John Thorburn.
James Watson.
Robert Whitelaw.
Leonard Williams.
William Yorke.

SECOND PROFESSIONAL EXAMINATION.

Samuel P. Alexander.
William Allan.
Harry Bamber.
William T. Blakely.
William Brown.
John J. Brownlee.
William Buchanan.
Quintin Chalmers (3).
George M. Connor.
James Crawford.
Alexander Dewar.
William Downie, M.A.
Robert Eaglesham.
James D. Farquharson.
James Findlay (3).
Alexander Frew (3).
Andrew B. Fulton.
Robert C. Gilroy.
John Graham.
W. James Hoime.
John A. Kerr.
Alexander M. Kinghorn.
William Kirkland.
Alexander Kirkpatrick.
J. Begbie Laing.
Robert Livingstone.
W. Gray Marshall.
R. Gibson Miller.
David Moffat.
William C. C. Muir.
Andrew Murdoch.
Thomas C. M'Culloch.
Roderick M'Donald.
Alexander M'Kean.
Ernest M'Kenzie.
Charles M'Kinnon, M.A.
Donald J. M'Intosh.
Digby M. M'Phail.
James Railey.
Robert Ramsay.
William Rankin.
John O. Reddie.
George C. Rodger.
Robert Routledge.
David Roxburgh.
Thomas Russell.
Gavin S. Scott.
Miller Semple.
J. Charles A. Smith.
John White.
Andrew Wilson.

THIRD PROFESSIONAL EXAMINATION.

Samuel Alexander.
Alexander G. Auld.
John Beveridge.
George Clark.
John Clerk.
William Colquhoun.
Francis H. Colvin.
J. B. Cumming.
John Cunningham.
David Findlay.
Alexander Frew (2).
Herbert M. Gay.
Michael H. Greener.
Thomas Howard.
Alexander Jack.
Arthur G. Keogh.
George A. Morris.
James W. A. Murdoch.
Duncan Macartney, M.A.
William M'Cracken.
William M'Crendie.
David MacDonald.
Neil C. M'Donald.
Duncan MacGilvray.
Hugh M. Mackintosh.
David Orr.

Alexander B. Paterson.
Alexander Peacock.
John Ritchie.
Richard A. D. Robb.
Alexander Robertson.
Frank Russell.
James Shaw.
Alexander J. F. Skottowe.
William F. Somerville, M.A.
James P. Smith.
Joseph Thornley.
George B. Todd.
R. Bruce Young, M.A.
Robert H. Young.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW. — At the April sittings of the Examiners the following gentlemen passed the Final Examination and were admitted Licentiates:—

Alfred F. Bossy, London.
John A. Carr, Glasgow.
Gordon G. Jones, Glasgow.
Colin Macdonald, Glasgow.
D. MacLachlan, Glasgow.
E. E. Tarleton, Birmingham.

ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH AND FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—The following gentlemen passed the Final Examination for the double qualification and were admitted Licentiates of the College and Faculty:—

Arch. B. Gemmel, Glasgow.
John Mackie, Aberdeen.
Wm. Middleton, Glasgow.
Henry Oakes, Glasgow.
Henry Read, M.A. Cantab., San Francisco and Glasg.

ROYAL COLLEGE OF SURGEONS IN IRELAND. — At a meeting of the Court of Examiners on April 20th and following days the undermentioned gentlemen obtained the diploma in Surgery of the College:—

William G. Butler, James L. Callaghan, Loftus Campbell, Michael Carr, Joseph Coffey, Sir Charles Coote, Bart., Charles A. Daley, Quinton R. Darling, Patrick T. Dillon, Alfred E. Dugdale, Sinclair Finlay, George Fisher, Arthur O. Fitzgerald, John R. Fitzgerald, Diego Gannon, James Hamilton, Allen H. Hanley, James J. H. Jackman, Joseph J. Jackson, Andrew J. G. Kelly, Christopher P. Kelly, William Love, Michael J. M'Cartan, Bernard R. M'Girrity, Alexander J. M'Kenzie, Charles J. Magin, Henry Morhead, Thomas Moore, Chas. G. A. Morier, Francis S. Morrison, Patrick H. Murray, Joseph Niblock, Robert D. Patterson, John Robinson, Albert W. Shepherd, John C. Soady, James L. E. Somers, Thomas W. Sproule, John Taylor, Henry R. Todd, William A. Tomlinson, Henry E. A. Warren.

APOTHECARIES' HALL. — The following gentlemen passed the examination in the Science and Practice of Medicine, and received certificates to practise, on May 3rd:—

Coyle, Edward, Bain-street, Glasgow.
Huzzey, Reginald Lee, Spa-road.
Roberts, Edward, North Parade, Aberystwith.
Roosmale-Cocq, F. Owen Young, Parkhurst-road, Tufnell Park.
Shorthouse, William Stanley Neville, Croydon.
Taylor, Alfred Everley, Claughton, Scarborough.
Tibbles, John Thomas, Melton Mowbray.

The following gentlemen also on the same day passed the Primary Professional Examination:—

Avery Clough Waters and Leonard James Willan, London Hospital.

LECTURES ON BOTANY AT CHELSEA GARDEN.—A course of botanical lectures and demonstrations was commenced on Saturday afternoon last at the Garden of the Apothecaries' Society at Chelsea, and was numerously attended, the lecture room being completely filled. The lecturer was Mr. J. G. Baker, F.R.S., F.L.S., of the Kew Gardens, who gave as an introduction to the subject a general view of the organs composing a perfect plant—as the root, the stem, the leaves, the flowers, and the fruit. After the lecture the audience were conducted through the garden, where the living specimens were explained and described in connexion with the discourse previously given. The lectures will be delivered on successive Saturdays during the summer months, and the admission is free.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BAKEWELL, R. H., M.D., has been appointed one of the Visiting Physicians to the Christchurch Hospital, New Zealand.

COCHRAN, CHRISTOPHER HENRY, L.R.C.P.E. & L.R.C.S.I., has been appointed one of the Surgeons to the Reading Dispensary.

DONKIN, HORATIO BRYAN, M.B.Oxon., F.R.C.P.Lond., has been elected Physician to the Westminster Hospital, vice Dr. Fincham, elected Consulting Physician.

DRESCHFELD, J., M.D., M.R.C.P.Lond., has been appointed Honorary Physician to the Royal Infirmary, Manchester.

FROST, W. ADAMS, F.R.C.S., has been appointed Assistant-Surgeon to the Royal Westminster Ophthalmic Hospital.

GLASSINGTON, CHAS. W., M.R.C.S., has been appointed House-Surgeon to the National Dental Hospital, Great Portland-street, vice F. Bate, L.D.S., resigned.

GRAHAM, C. R., M.R.C.S. &c., has been appointed Honorary Surgeon to the Royal Albert Edward Infirmary, Wigan.

GUTTERIDGE, EDWIN PARKER, M.R.C.S., L.S.A.Lond., has been reappointed Port Medical Officer; also Medical Officer of Health for the Urban Sanitary District, Maldon, Essex.

HARTRIDGE, GUSTAVUS, F.R.C.S. &c., has been appointed Assistant-Surgeon to the Royal Westminster Ophthalmic Hospital.

HAYES, FRANCIS GEORGE, L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer for the Danster District of the Williton Union.

LEGGE, RICHARD JOHN, M.D. Royal Univ. Irel., L.R.C.S.Ed., L.A.H.Dub., has been appointed Assistant Medical Officer to the Derby County Asylum.

PHILIPSON, GEORGE HARE, M.A., M.D., D.C.L., F.R.C.P., has been reappointed a Physician to the Newcastle-on-Tyne Infirmary for a period of fifteen years.

PIZEY, GEORGE, M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer of Health for the Clevedon Urban Sanitary District.

ROOCROFT, W. MITCHELL, M.R.C.S., L.R.C.P.Ed., has been elected an Honorary Medical Officer to the Royal Albert Edward Infirmary, Wigan.

SHARPIN, Mr. E. COLBY, has been appointed House-Surgeon to the Lincoln County Hospital.

SMITH, NOBLE, F.R.C.S.Ed., has been appointed Orthopædic Surgeon to the British Home for Incurables.

STEELL, GRAHAM, M.D.Ed., M.R.C.P.Lond., has been elected Honorary Assistant-Physician to the Royal Infirmary, Manchester, vice Dr. J. Dreschfeld.

WATSON, J. COATSWORTH, has been appointed Medical Officer to the East Bishopwearmouth District, and Public Vaccinator to the East Bishopwearmouth and Sunderland Districts of the Sunderland Union.

WINSTANLEY, R. W., L.R.C.P.Ed., M.R.C.S., has been appointed Resident Assistant Medical Officer to the Victoria Dock Dispensary, vice A. Oakley, resigned.

Births, Marriages, and Deaths.

BIRTHS.

BARR.—On the 2nd inst., at 1, St. Domingo-grove, Liverpool, the wife of James Barr, M.D., of a son.

BOLTON.—On the 28th ult., at Kustendjie, Roumania, the wife of A. Irwin Bolton, M.B., A.B. T.C.D., of a daughter.

COOKE.—On the 29th ult., at Warrior-square, St. Leonard's-on-Sea, the wife of John Cooke, M.D.Lond., of a daughter.

LANGDON.—On the 26th ult., at Gibraltar, the wife of Surgeon J. Sydney Langdon, Army Medical Department, of a daughter.

MACKENZIE.—On the 2nd inst., at Milnsbridge House, near Huddersfield, the wife of John Mackenzie, L.R.C.P.Ed., L.R.C.S.Ed., of a son.

RAYNER.—On the 7th inst., at Tiviot Dale, Stockport, the wife of Edwin Rayner, M.D.Lond., F.R.C.S., of a daughter.

ROBERTS.—On the 5th inst., at Dragonfield, Uxbridge, the wife of Charles Roberts, M.R.C.S., of a daughter.

STAMPER.—On the 3rd inst., at Pembroke Dock, the wife of J. Fenton Stamper, M.D., of a daughter.

MARRIAGES.

BERNAYS—BOYS.—On the 5th inst., at St. Mary's, Selly Oak, Worcestershire, Adolphus Vaughan Bernays, B.A., M.B.Cantab, M.R.C.S., second surviving son of the late Rev. L. J. Bernays, Rector of Stanmore, to Emily, only daughter of the late Charles Boys, Esq., of the Inland Revenue Department, Somerset House.

MACDOUGALL — MUNRO-MACKENZIE. — On the 25th ult., at Garrion Tower, Lanarkshire, by the Rev. James Cameron Lees, D.D., one of Her Majesty's Chaplains for Scotland, John Aymers Macdougall, M.D., of Carlisle, to Helen Mary, youngest daughter of John Munro-Mackenzie, Esq., D.L., of Mornish, Argyllshire.

WOOLLERTON—COLLET.—On the 25th ult., at St. George's, Bloomsbury, Edwin Goodburn Woollerton, Surgeon, of Wendover, to Elizabeth Helen, fourth daughter of R. S. Collet, late of The Hale, Wendover.

DEATHS.

BRUCE.—On the 30th ult., at 70, Old-street, E.C., suddenly of apoplexy, Robert Bruce, Surgeon, aged 60.

JONES.—On the 5th inst., at Bylocks, Enfield Highway, after a short illness, T. W. M. Jones, M.D., in his 76th year.

RENTON.—On the 3rd inst., at his father's house, Rothesay-place, Edinburgh, Alexander Adam Renton, M.D., F.R.C.P.E., late Surgeon-Major, Madras Army, younger son of Robert Renton, M.D.

ROPER.—On the 3rd inst., at Chartreuse, Richmond, Surrey, Giles Symonds Roper, M.R.C.S., late of City-road, London, aged 67.

SHORT.—On the 27th ult., at Clenchwarton, Norfolk, William Hooper Short, L.R.C.P.Ed., aged 42.

SMITH.—On the 5th inst., at the residence of his son, Bisley Rectory, George Pyemont Smith, M.D., late of Mount Stead, near Leeds, aged 67.

TILTON.—On the Sabbath evening of the 22nd ult., at Clifton, Bristol, Rowland Tilton, L.R.C.P.Ed., of Park Villa, Stonehouse, Gloucestershire, in his sixty-fifth year. This fond husband "sleeps in Jesus." (1 Thess., 4th ch., 14th v.) Relatives and friends will kindly accept this intimation.

YATES.—On the 29th ult., at his residence, Tregew, Falmouth, Walter Yates, F.F.P.S., late of Nottingham.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, May 10th, 1883.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
May 4	29·87	N.	42	38	91	51	33	..	Cloudy
,, 5	29·87	N.E.	40	36	95	61	32	·06	Cloudy
,, 6	29·87	E.	50	49	103	63	38	..	Cloudy
,, 7	29·70	N.E.	50	48	80	60	43	·14	Cloudy
,, 8	29·58	S.	49	47	..	50	44	..	Overcast
,, 9	29·48	N.E.	47	45	..	49	44	·34	Overcast
,, 10	29·61	W.	44	38	..	42	37	..	Cloudy

Medical Diary for the ensuing Week.

Monday, May 14

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

Tuesday, May 15.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—2 P.M. Annual Meeting.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION.—3 P.M. Professor McKendrick, "On Physiological Discovery."
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Dr. Garson, "On the Integumentary System of Birds."
PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. The following specimens will be shown:—Multiple Growths in the Bladder; Hydatid Cyst in Lung; Ulcerated Intestines; Disseminated Growths in Liver; Larynx from a Case of Scarlatina; Larynx from a Case of Measles; Acute Atrophy of Liver; Specimen of Vacuolation of Brain; Parts after Cystotomy; Comminuted Fracture of Tibia; Bones from a Case of late Rickets; Hypertrophy of Neck and Condyle of Jaw; Bacilli of Leprosy; Hernia of Intestine through Posterior Layer of Peritoneum (recent); Remarkable Case of Parasites (card); Multiple Exostoses (living).

Wednesday, May 16.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thurs days, at 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.—Skin Department: 1.45 P.M., and on Saturday at 9.15 A.M.

Thursday, May 17.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M
ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.
ROYAL INSTITUTION.—3 P.M. Professor Tyndall, "On Count Rumford."
HARVEIAN SOCIETY.—8.30 P.M. Mr. Gant, "On a Case of Umbilical Hernia, with coexisting Peritonitis, simulating Strangulation."—Mr. Crippe Lawrence, "On a Case of Broncho-pneumonia occurring in a Child."—Dr. Buzzard, "On the After History in some Cases of Syphilitic Disease of the Nervous System."

Friday, May 18.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Professor Turner, "On Domestic Industry in the Villages of Russia."

Saturday, May 19.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Professor Turner, "On Russian Social Life."

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.
All communications relating to the editorial business of the journal must be addressed "To the Editor."
Lectures, original articles, and reports should be written on one side only of the paper.
Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.
We cannot prescribe, or recommend practitioners.
Local papers containing reports or news-paragraphs should be marked.
Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

MORTALITY OF OCCUPATIONS.

DR. GRIMSHAW, the Registrar-General for Ireland, in his quarterly summary for March, has added a table so constructed as to show the relative mortality of the various classes of the population of the Dublin registration district based on the returns of the last census. This system was commenced in the weekly return for the 6th January last. From this table it appears that during the past quarter the deaths in families of the "professional and independent class" were equal to an annual rate of 24·6 per 1000 of the persons in that class; in the "middle class" the death-rate was 29·0 per 1000; among the "artisan class and petty shopkeepers" it was 28·2; and in the "general service class" and the "inmates of workhouses" combined it was as high as 44·8.

Mr. R. B. Morrell.—A master is not bound to provide medical attendance for his servants, but all good masters should do so for good servants, and it adds very much to the grace of the act when the master asks his own doctor to attend.

M.D., F.R.C.S.—By the 27th clause, a registered practitioner using a title which he is not entitled to take or use, is liable to a penalty not exceeding £20.

M.R.C.S. Eng., L.S.A. London.—We should not like to see the London College follow the bad example of the Edinburgh colleges.

THE COLLEGE OF SURGEONS' LIBRARY.

To the Editor of THE LANCET.

SIR,—I think many of your readers will join with me in protesting against the unnecessary frequency with which the library of the Royal College of Surgeons is closed every time an examination happens to be on hand. In an ordinary way the doors are never opened until eleven o'clock in the morning—an unusually late hour, which causes those who are in the habit of resorting to it great inconvenience and loss of time. I regret to see this splendid temple of science, where the spirit of Hunter once reigned, wholly given up to the trade in diplomas, as if this were the sole aim and object of modern science worthy of being encouraged. Such a desecration would be impossible but for the exorbitant fees paid to the examiners, not much less than the modest sum of £6000 a year! What a brave time they are having at the fountain head of the golden stream in the pleasant valleys of El Dorado!

I am, Sir, sincerely yours,
May 4th, 1883. W. ROGER WILLIAMS.

To the Editor of THE LANCET.

SIR,—There is one effect which the new Medical Bill may have on the College of Surgeons, which has, I think, been somewhat neglected; it is this, that being relieved to a great extent of the labour of conducting examinations, it will be able to devote more of its time to developing the facilities of the library. It seems somewhat of a disgrace that this splendid collection of books should be to many of the profession at least little more than a locked up treasure. The library is only open six hours a day (two on Saturdays), and of this three hours are during the busiest part of the day—viz., from 11 to 2. Not only that, but this scanty allowance is subjected to many interruptions; thus the week beginning April 16th it was closed one whole day, and on two others at 4 o'clock, while in the beginning of May it will be shut on no less than three days. In contrast to this may be mentioned the much greater facilities offered by the Oxford University, Owens College, Pharmaceutical Society, Dorpat and Strassburg Universities, &c., in some of which the library is open of an evening, in others the books are lent out, while the College of Surgeons does neither. Is it not time that something were done to render this library available for the profession generally?

I am, Sir, yours very truly,
May 3rd, 1883. F.R.C.S.

INDUSTRIAL DWELLINGS.

THE "improved" dwellings erected in Spitalfields would seem to leave very much to be desired in the way of further improvement. At high noon in the summer time the tenants are stated to be compelled to use artificial light; there appears to be no open space or yard attached to the building, and overcrowding is said to be far from uncommon.

Practitioner might consult Dr. Burney Yeo's book on the subject, published by J. and A. Churchill.

ANIMAL AND HUMANISED VACCINE LYMPH.

To the Editor of THE LANCET.

SIR,—For a considerable time the Government Medical Authority seemed to have refused or showed great reluctance to advise Government to introduce animal vaccination in England, and the chief reason assigned for this, so far as I could gather, was the very small percentage of success obtained in vaccination with animal lymph, and the difficulty of securing a continuous supply in the calf. Dr. Blanc, of the Indian Medical Service, Bombay, who had successfully practised animal vaccination in London during his stay there in 1869, brought a quantity of the virus with him on his return to India, and introduced it in Bombay. Being in charge of the Residency Vaccine Department, it fell to my lot to keep up the supply, and make use of the lymph and watch its effects and progress.

Just about the time I found in one of your numbers (Nov. 12th, 1870, page 677) a paragraph on the subject. It ran as follows:—"Mr. Simon affirms that the system of animal vaccination has certain 'great disadvantages,' and these are its various peculiar liabilities to failure. First, that apparently even able and painstaking operators may find it impossible to transmit successive vaccination from calf to calf without very frequent recurrence of failures and interruptions. Secondly, it is found that, in the transference of infection from calf to the human subject, even under the most favourable circumstances—i.e., by experienced operators and with lymph direct from the calf to arm, as, for instance, at Rotterdam—the proportion of non-success was nearly twenty times as great as in the ordinary arm-to-arm vaccination, a matter, as Dr. Seaton observes, of special importance in reference to outbreaks of small-pox, where, for the prevention of the spread of the disease, it is of all things necessary that the lymph used should be such as to ensure immediate success. Thirdly, that the calf lymph, as compared with ordinary lymph, is peculiarly apt to spoil with keeping; and, in the form of tube-preserved lymph can so little be relied upon, that the Rotterdam establishment, in distributing supplies of lymph, now use only that from the human subject."

I found that this was in exact correspondence with my own experience here on the subject. As, however, with us it was a matter of this lymph of uncertain effects or no lymph at all, we had to stick to it, trying as best we could to keep it up by getting fresh supplies from Dr. Warlomont, of Brussels.

It is now thirteen years that I have been carrying on animal vaccination in Bombay, and since September, 1877—since, in fact, the introduction of the Compulsory Vaccination Act—I have not used a drop of humanised lymph; and I have now the satisfaction of seeing our lymph in a very efficient state of activity, as we can safely calculate upon a success as great as with humanised lymph itself.

We have had during the last three months a terrible epidemic of small-pox in Bombay. It is waning, but has not quite left us yet. During its course we vaccinated and revaccinated thousands with the greatest success. Indeed, but for this abundant supply of lymph we should have despaired of being able to vaccinate even a small portion of those who applied for the operation. As it was, we could take our inoculated calf from street to street and door to door and vaccinate the unprotected. In this way we vaccinated a pretty large number of very tender aged infants—infants barely six weeks old—and who would never have been brought to the public vaccine stations for the operation.

Animal vaccination I see has now been established in England as a State institution. I should feel much obliged if you would kindly let me know what is the highest percentage of success secured there with animal lymph. In Bombay between 95 and 98 per every hundred primary vaccinations may be safely taken as the number of success at the first operation, and there are very few indeed that resist a second or a third operation. The induced vaccinia is perfect in every respect, and though we have had a terrible epidemic of small-pox of a very malignant type raging, only six cases of small-pox occurring in the previously successfully vaccinated persons came to my notice. I would also thank you, or any of your many readers, if you will kindly inform me as to the best method of preserving animal lymph, and with what success it has been adopted in England.

I am, Sir, yours most obediently,
AMANTA CHANDROBA,
Assistant-Surgeon, Superintendent of Vaccination, Presidency Circle, Bombay.

Central Vaccine Depôt, Bombay, April 13th, 1883.

*** At the animal vaccine establishment of the Local Government Board the success is 99·66 per 100 of primary vaccinations and the insertion success over 93·0 per hundred insertions. It is believed that animal lymph is best preserved on ivory points, but the evidence is not yet conclusive. Vaccinations with lymph thus stored are worth about 3-5ths of vaccinations done direct from the calf, taking size of resulting vesicles and numbers of vesicles into consideration.—ED. L.

REJECTIONS AT PRELIMINARY EXAMINATIONS.

A CORRESPONDENT points out that the College of Preceptors in the last year only passed 33·8 per cent. of candidates, and the Society of Apothecaries 33·2. The Cambridge University examined nineteen candidates in accordance with the requirements of the Medical Council. All were over age, and arrived only at the junior standard; but none satisfied the requirements of the Medical Council.

A Constant Subscriber.—The reply was given in our Issue of April 28th page 760, but the name should have been Wooton, not "Wotton."

Mr. Knowsley Thornton.—If possible.

"SANITATION AMONG CROFTERS."

To the Editor of THE LANCET.

SIR,—I was extremely pleased to see in your issue of April 21st the remarks of Dr. Jefferies anent the position of parochial medical officers in the North Highlands of Scotland, and feel inclined to add my quota to the correspondence.

I was induced to go north on promise of an exceptionally large salary from the Board, but when I had been in the parish about three months I was informed that this large sum had been held out merely as a bait, and that at the end of three months it would be reduced two-thirds. I was told that it was usual in that parish at least for the medical gentleman to go round to the neighbouring proprietors and request them to add a little to the sum given by the Board, and so make up a sum which would induce one to remain with them. This was what was suggested to me to do when my salary was cut down. To assume the garb of a beggar forsooth and hawk around for alms! After some correspondence with the Board, my original salary was paid me as per first agreement, but when I obtained another appointment in the south the Board coolly turned round and told me that they found they had been paying me too much in the past, and that for the current quarter they altogether refused to give me anything. This is some years ago, and although my legal adviser has written to them several times, they have never deigned to answer his letters. It is, alas! too true all that Dr. Jefferies says about keeping the individual members, and more especially the chairman of the Board, sweet; and in regard to the fees to be charged to these gentry, one "hielan laird" was extremely indignant with me for having the audacity to render him a bill at all, and indeed never employed me again. I am, I may state, no longer at the mercy or caprice of highland chieftains who know how to wield the

April 23rd, 1883. LOCHABER AXE.

A Member of Thirty Years' Standing.—The charter is printed in the Calendar of the Royal College of Surgeons.

Dr. Meredith.—Soon.

Regular Practitioner.—The law allows "reasonable expenses."

"VERMOUTH."

To the Editor of THE LANCET.

SIR,—Having lived for several years in a country where Vermouth is drunk in large quantities, I can say, in answer to your correspondents, "S." and "W. T. S.," that it is generally considered a harmless drink, while absinthe is acknowledged to be dangerous, even by many of those who take it. Pure Vermouth of Turin (for example, that of Fratelli Cora) is white wine to which vegetable bitter substances of several kinds have been added. Some sorts, labelled "Con China," contain quinine. It is essential to know that many bad and unwholesome compounds are sold under the name of Vermouth, so that care should be taken to procure the genuine article. In small doses Vermouth is an agreeable aromatic and bitter tonic; it is slightly laxative, as it contains some tamarindus. In large and long-continued doses it may produce effects analogous to those of absinthe. It may be useful as a medicine in appropriate cases, but is open to the objection that many people continue to drink it habitually and in too large a quantity after having taken it for a time as a remedy.

I am, Sir, yours faithfully,

May 7th, 1883. M.D.

Appetitus Rationi Pareat.—Our reading of the Act coincides with that of our correspondent.

J. L.—Thanks. The extract is hardly suitable for our columns.

PECULIAR COLOUR REACTION IN URINE AFTER THE ADMINISTRATION OF GURJUN BALSAM.

To the Editor of THE LANCET.

SIR,—I have lately been trying gurjun balsam in chronic gleety discharges, &c., and in examining the urine of such patients I find a very remarkable change of colour follows after boiling on adding a small quantity of nitric acid, the urine becoming of a blood-red colour, soon changing to a deeper red. This peculiar colour reaction is very lasting, as I have found it still existing, though in a less degree, in patients who have not taken any of the balsam for two weeks. The colour principle appears to be contained in the balsam, and passes through the system unchanged, for if a watery extract be made and treated with nitric acid, an intense red is obtained on boiling. I should be very glad to have any further light thrown upon it. It seems just possible that a portion of its use as a cure in chronic diseases may be due to its slow elimination from the system.

I am, Sir, yours, &c.,
BUXTON SHILLITOE.

Frederick-place, Old Jewry, E.C., April 24th, 1883.

THE BROWN INSTITUTION.

MR. JESSE informs us that the question of experiments on animals at the Brown Institution will be placed before the Charity Commissioners by his Society.

Dr. Bell Taylor has favoured us with a letter and a pamphlet. If our correspondent will refer to Captain Harris's report for 1880, p. 5, he will see that our figures of "the ratio of cases of disease per 100 examinations made by the visiting surgeons" are strictly correct. If he will read the article in our present issue, he will see exactly in which years the Acts were applied to the different districts; in 1866 the Acts existed practically much as they are at present, and the earlier statistics only prove to us how beneficial to the health of the unfortunate women the enactment of compulsory examination must have been. Since our correspondent, in his statement of the sanitary value of the Acts, so far as the ratio of disease in prostitutes is concerned, has, in a comparison between the years 1870 and 1880, altogether omitted in his pamphlet (p. 15) a reference to eight years in which this has been lower than in 1870, and takes no notice of the years 1867, 1868, or 1869, when the Compulsory Clauses were in force, it cannot be wondered at that we differ in our conclusions. But this difference affords no justification for the tone of his letter.

Unqualified.—The Higher Title part of the Bill has been altered. We shall try to find room for the other part of our correspondent's letter.

M.R.C.S. has not enclosed his card.

AMPELOPSIS JAPONICA.

To the Editor of THE LANCET.

SIR,—Some years ago Messrs. Veitch, the nurserymen, introduced into this country from Japan a deciduous plant, much admired for the beauty of its foliage, and commonly known as the "Ampelopsis Japonica," but possibly a species of Rhus toxicodendron. As the plant has already been widely distributed in this country and on the Continent, and is likely to become general in gardens, I think the poisonous nature of its sap should be generally known, several of Messrs. Veitch's men having suffered severely from a peculiar skin eruption after being engaged in pruning the plant. The eruption consists of raised patches of inflammation at first resembling ordinary urticaria, but followed by very large blisters and accompanied by great irritation, and lasting for nearly three weeks; in one instance returning a second and a third time with almost equal severity after intervals of six weeks and two months respectively, without fresh contact, the patient being during the third attack many miles away in the country. The eruption is so characteristic as to be unmistakable. The parts affected in each instance were the hands, arms, face, neck, and genitals, the poison being conveyed to the other parts of the body probably by the hands.

Confirmation of the above is received from France, some of the men employed by M. Le Roy of Angers, who procured the plant from Messrs. Veitch, having been very seriously poisoned in a similar way.

I am, Sir, yours faithfully,
OWEN PRITCHARD, M.R.C.S.

Heber Villa, Kingston-hill, April 28th, 1883.

Indicus Infelix.—Our correspondent's description probably owes much of its dark colouring to hepatic derangement.

Mr. Parson.—Next week, if possible.

ABSENCE OF LOWER AND DEFICIENCY OF UPPER INCISOR TEETH.

To the Editor of THE LANCET.

SIR,—A child two years and four months old was brought to me the other day. Its dentition was different from any I have ever previously seen. The teeth were all perfect with the exception of the lower incisors, which were entirely absent, the gums were sharp, and there was no appearance of rudimentary teeth. There were only two upper incisors, which were very large, and shaped like strong canine teeth of an adult. The family history was good; no scrofulous tendency known.

I would be obliged if any of your readers could say whether they have seen such a case, and whether during the second dentition the want was supplied.

I am, Sir, yours faithfully,
JOHN R. HAMILTON, M.D., &c.

Elm House, Hawick, N.B., May 7th, 1883.

Dr. Kirk (Partick).—We cannot devote more space to the discussion.

Nux Vomica.—We do not prescribe.

"MEDICAL ENTERPRISE IN DURHAM."

To the Editor of THE LANCET.

SIR,—In THE LANCET of to-day you publish an instance of medical enterprise and etiquette in Durham, where, in the attempt to raise a practice, the expedient of issuing handbills has been resorted to. As my name is associated with it, I consider it my duty to free myself from the imputation of what I regard as most unprofessional conduct, by thus publicly stating that my name has been added to the handbill without my permission or even knowledge. I have at all times gladly given my services to the patients of any of my neighbours in their absence, but do not wish to have it publicly advertised.

I am, Sir, yours, &c.,
JAMES ARTHUR, L.R.C.P., &c.

Wingate, Durham, May 5th, 1883.

HOSPITAL CHARITY.

AT the amateur dramatic performances at the Prince of Wales's Theatre Liverpool, on May 1st, promoted by the members of the legal and medical professions in aid of the Royal Infirmary Rebuilding Fund, the following prologue was recited:—

"Good people all, before the curtain rise
And busy minds begin to criticise,
While yet good humour makes you more inclined
To pardon errors and to faults be blind,
We would bespeak your sympathy to weigh,
Against our humble efforts as we play,
The good intent which in our aim is found—
Aid for the sick, amusement for the sound;
Thus helping them, and bringing smiles to you,
We face the lights, and light up faces too.
Friends of the sick, the suffering, the poor,
You whom kind Heaven hath blessed with ample store,
We bade you come to aid a noble cause,
And ask for it, not for ourselves, applause.
Then be the critic's bow for once unbent,
And let good humour wait on good intent.
But, if you criticise, be this your cue,
It had been better done, if done by you.
So shall self-satisfaction's genial glow
Dispose you to be lenient, and show,
Though some who fail turn critics in their need,
He's the best critic who can best succeed."

Scolopax will no doubt obtain the information he desires from the hon. secretary of the Brussels Graduates' Association, 20, Golborne-road, W.

Dr. Menzies (Geneva).—It is contrary to our custom.

HYDROPHOBIA.

To the Editor of THE LANCET.

SIR,—An inquest was held before me on the 24th April last, at the Leicester Infirmary, on the body of a man named Toon, aged fifty-six years, a waggoner, residing at Thurmaston, about three miles from Leicester, who was bitten in the left hand by a dog at Thurmaston on the 20th January last. The man did not obtain professional assistance at the time. His wife dressed the wound, and it healed up in about a fortnight. Symptoms of hydrophobia afterwards disclosed themselves, and ultimately the man was removed to the infirmary on the 21st April, and died there on the following day (according to the medical evidence after a post-mortem) unmistakably from hydrophobia.

It is stated that the dog has not displayed symptoms of hydrophobia; it is alive, and as a fact was at large until Wednesday last, when, in consequence of an application to the magistrates, the owner of it offered to keep it under control until he could sell it.

The house-surgeon at the infirmary stated at the inquest that it was not within his experience that a dog not suffering from hydrophobia could communicate the disease to a human being, and as the case may be of interest to the medical profession, I trouble you with this communication in order that you may bring it to the notice of your numerous readers, if you think it desirable to do so.

I am, Sir, yours faithfully,
GEO. T. HARRISON,
Coroner for the Borough of Leicester.

Leicester, May 4th, 1883.

Mr. G. C. Franklin would do well to consult Mr. Pridham, the solicitor of the Medical Defence Association.

"CULPABLE LAXITY IN THE SALE OF POISONS."

To the Editor of THE LANCET.

SIR,—I was pleased to notice in THE LANCET of April 28th an article on the above. I have had some opportunity lately of becoming painfully aware of the extent to which this trade is carried. Only a few days since I was asked to see an infant aged three months which was suffering undoubtedly from the effect of opium-poisoning. The signs and symptoms were as follows:—The child was badly nourished; it had a dirty cadaverous-looking skin, the face being pinched and cyanosed; the pupils contracted; the respiratory movements were very feeble, and the tongue dry. The mother stated, "The child is greatly confined in its bowels. It is very thirsty; putting it to the breast does not satisfy it. It cannot cry like other children." She confessed to being in the habit of taking opium in the form of the "extract," though she stoutly denied giving the child any.

This case is of peculiar interest. Firstly, as the woman denied giving opium to the child, could it have been affected through the mammary secretion? Secondly, that, no matter how the opium was introduced into the child's system, it was obtained in large quantities from a chemist, and is still.

I am, Sir, yours truly,
M. DUTCH, L.R.C.S.I.

Littleport, May 1st, 1883.

THE ROYAL RED CROSS.

To the Editor of THE LANCET.

SIR,—Since the Queen, by Royal mandate, has been graciously pleased to institute "the Red Cross" as a fitting decoration for meritorious female tenders of our sick and wounded soldiers and sailors, might I humbly suggest, through the medium of your widely circulated journal, that the disinterested and devoted Florence Nightingale be the first lady on whom so honourable a distinction is conferred.

I am, Sir, yours obediently,
CLARENCE FOSTER.

Leeds, May 7th, 1883.

"A CASE FOR GENERAL SYMPATHY."

MR. HENRY C. BURDETT, 39, Gloucester-road, Regent's-park, desires us to acknowledge the receipt of the following subscriptions towards the "Hurford Fund," in response to his letter, which appeared in THE LANCET of April 14th. Amount already acknowledged, £342 14s. 6d.

C. M. Elliott, Esq.	..	£5	5	0	E. H. Addenbrooke, Esq.	£1	1	0
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SNAKE BITE.

To the Editor of THE LANCET.

SIR,—I see from your columns of April 21st that a case of cobra bite has recovered in South Africa, under the care of Messrs. Browne and Smyth. I think if the case be one of genuine bite from a cobra these two surgeons deserve credit for their skill. Is the cobra, though, a native of Africa? It has always been my impression that that venomous reptile was peculiar to India. Perhaps in the case in point it was mistaken for the bite of a cobra. It would have been better if Messrs. Browne and Smyth had given more information, to enable one to judge whether the case was a cobra bite; but they have failed to give any description of the snake or the nature of the wounds it inflicted; of course much turns upon this point. I think that the symptoms which have been so graphically described will not lead one to the conclusion that the case was one of cobra bite; and therefore I attach more importance to the description of the snake and its wound. The effects of bites of snakes differ according to their tribe and the condition in which they are at the moment of attack, and hence the necessity of identifying the snake and its bite. So many deaths have occurred in India from the bite of the cobra, and so few have survived, that it would be perhaps useful to surgeons in that county to know the details of this case, supposing it to be a genuine one of snake bite.

I think they are in error in saying that most vague ideas exist in books with regard to the treatment of snake bites and stings. Much has been said upon the subject by Sir Joseph Fayrer, whose experience, I dare say, has been extensive with regard to the bite of cobras in India. Messrs. Holmes and Erichsen also treat of the question in their books, which are well known to every student of surgery both at home and abroad. Halford's treatment by intravenous injection of ammonia (the strong solution diluted with twice or thrice its bulk of distilled water, of which twenty to thirty minims are injected into a subcutaneous vein) has met with fair trial in Australia, and in many cases has proved valuable in saving many an unfortunate victim.

Messrs. Browne and Smyth, who seek information on this subject, should certainly endeavour in the next case of snake bite they have to give fuller information as to the genuineness of the case. They have certainly left behind them a store of knowledge in not acquainting themselves with Sir Joseph Fayrer's book on Indian Snakes, and also Halford's well-known treatment by intravenous, and not simply hypodermic, injection of ammonia. I am, Sir, yours very truly,

April 23rd, 1883. G. H. F.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. M'Vail; Dr. Theodore Williams, London; Mr. A. C. Preston, Lincoln, N.Z.; Dr. Dudfield, London; Mr. T. Holmes, London; Mr. J. Lyon, London; Mr. J. E. Lane, London; Mr. Vitali, London; Dr. Bampton, Plymouth; Mr. T. P. Taylor, Colchester; Mr. Arthur, Wingate; Mr. Herbert Page, London; Mr. J. B. Sutton, London; Dr. Menzies, Geneva; Mr. O. Pemberton, Birmingham; Mr. Freeman; Mr. Saxon Snell, London; Dr. Charteris, Glasgow; Messrs. Monk, Newell, and Bryon; Dr. Norris, Birmingham; Mr. Harrison, Leicester; Dr. M. Lindsay, Mickleover; Mr. Dolan, Halifax; Mr. Walker, Redcar; Mr. Escreet, Hempstead; Dr. Kirk, Partick; Mr. Knowsley Thornton, London; Dr. Bakewill, Christchurch, N.Z.; Mr. Berry, Wigan; Dr. R. Fowler, London; Mr. Nankivell, Chatham; Mr. Puddicombe, Teignmouth; Mr. Carruthers, Kegworth; Mr. Washum, Kensington; Mr. Browne, London; Mr. Thorn, Norwich; Mr. Reeves, London; Mr. Green, Chelsea; Messrs. Livingston and Co., Edinburgh; Dr. Alexander, Glasgow; Messrs. Deighton and Bell, Cambridge; Messrs. Byles and Son, Bradford; Messrs. Beal and Co., Brighton; Messrs. Goddard and Massey, Nottingham; Mr. Marley, Padstow; Mr. Macpherson, Middlesborough; Miss Tanner, St. Peter's-park; Dr. Norman Kerr, London; Mrs. Reynolds, Liverpool; Messrs. May and Co., London; Mr. Thomas, Liverpool; Mr. Messmann, New York; Dr. Robert Lee, London; Mr. Illingworth; Mr. G. R. Jesse, London; Dr. Glascott, Manchester; Mr. E. Prideaux, Wellington; Mr. Talbot, London; Mr. Hosack, Birmingham; Mr. Savory, London; Mr. E. W. Wallis, London; Dr. A. Wise; Dr. Thomas Oliver, Newcastle-on-Tyne; Surgeon-Major Dove; Dr. Baines; Dr. W. J. Brown, Chester-le-street; Mr. Michelli, London; Mr. Brown, London; Mr. Fairbridge, London; Mr. Walker, London; Dr. Bellis, London; Mr. R. Freeman, London; Mr. Caiger, York; Dr. Nattrass, Sunderland; Mr. Elliott, Carlisle; Mr. De Fraine, Aylesbury; Dr. Wallas, Preston; Dr. Cooke, Sheffield; Mr. Fiske, London; Regular Practitioner; M.D.; India; T. C. M.; T. F., Oldham; An Indignant Teacher; A Member of Thirty Years' Standing; M.B., India; T. T. T.; Doctor; Oculus J. G.; A. B.; &c., &c.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Dowse London; Dr. Beale, London; Messrs. Bell and Bradfute, Edinburgh Dr. A. B. Squire, London; Mr. Wilson, Nottingham; Mr. Sergeant, Camden-town; Dr. Branson, Huddersfield; Mr. Evans, Llandyssal; Mr. Ryan, London; Mr. Sollitt, Scarborough; Dr. Kerr, Crawshaw Booth; Mr. Hatcher, Taunton; Mr. Llanwarne, Hereford; Dr. Peard, Fermoy; Dr. MacDougall, Carlisle; Dr. Mackenzie, Huddersfield; Mr. Holdsworth, Hendon; Mr. Young, Ardsley; Dr. Bodington, Kingswinford; Mr. Lucas, Kendal; Mr. Horne, York; Mr. Dale, Walthamstow; Mr. Saunder, Manchester; Mrs. Spence, Glasgow; Dr. Royle, Jersey; Mr. Fisk, Germany; Mr. Pernisch, Engadine; Messrs. Tarrant and Frost, Merthyr Tydfil; Mr. Squire, London; Mr. Lloyd, Sittingbourne; Mrs. Munks, Peterborough; Mr. Allsop, Leeds; Mr. Fox, Greenock; Mr. Somerville, Chesterfield; Mr. Kiltoe, Nailham; Mr. Clarkson, Bristol; Dr. O'Dwyer, Cairo; Mr. J. Ward, London; Mr. Robinson, Skelmorlie; Messrs. Porteous and Co., Glasgow; Mr. E. Smith, London; Dr. Jones, Camberwell; Mr. Foster Hammersmith; Messrs. Jones and Son, Llanfyllin; Dr. Lidiard, Kirkby Lonsdale; Mr. Peel; Mr. McFadden, London; Mr. Newman, London; Mr. Wilson, Leicester; Mr. Lamond, Glasgow; Dr. Norman Kerr, London; Miss Bewley, Wakefield; Medicus, Oxford; Achilles; Z. A., Dawley; Medicus, Sowerby-bridge; Fides, Leicester; F. F.; R.; M., Coothill; Juvenis; D. G., Amersham; L. B. L.; Hume; M.D., Kelfield; E., Hampstead; Mater, Brighton; The Secretary, Lancaster Infirmary; Fides, Filey; D., Preston; P. B., Manchester; Zeta; T. F., Oldham; M.R.C.P., Manchester; M.D., Oxford; M.P.; C. D, Hartlepool; H. N.; Medicus; G. O. M.; P. R. S., Biggleswade; B., East India-road; R. T. B.; Seaford; H. R., Stockport; Kappa; A. Y.; Specialist, Harrow; Z. A.; Medicus; W. W., Stafford; T. H.; M. S. W., Uttoxeter; T. J. J.; &c., &c.

Glasgow Herald, Bendigo Advertiser, Surrey Comet, Nottingham Daily Express, Englishman, Chatham and Rochester News, Western Daily Mercury, &c., have been received.

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